

An exploration of services and member profiles at Senior Service
Centres in the Western Cape, South Africa



by

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ABSTRACT

An exploration of services and member profiles at senior service centres in the Western Cape, South Africa

Introduction

The number of South Africans aged 60 years and older is increasing. The National Development Plan (NDP) aims to raise average life expectancy to 70 years by 2030. In response to similar global trends, the World Health Organization (WHO) developed the global Active Ageing Policy Framework (AAPF) to inform the actions taken by countries to address the needs of older persons, acknowledging the different contexts and cultures. The WHO recommended that the framework should have been evaluated to test its applicability and use in member countries by the first half of the twenty-first century. In South Africa, Senior Service Centres for Older persons were set up in communities to provide services to enhance the achievement of the goals of the AAPF. Unfortunately, little information is available on how the framework has been applied to inform services offered in African countries, including South Africa. This study explored services provided by Service Centres for Older Persons in the Western Cape using the WHO framework on Active Ageing as a guide to the services. The study was conducted in two phases.

Aims

In the first phase, the study explored the characteristics of Service Centres – the organisational structures, the types of services offered, the profile of the managers, and their perception of the needs of the members of the centres. In the second phase, the study explored the profile of the members of these centres by determining their socio-demographic profile, health and psychosocial characteristics.

Methodology

In phase 1, forty-one service centres were selected by stratified random sampling to proportionally represent the five districts and the Cape Metropole in the province. Only 35 service centres consented to take part in the study. In phase 2, a sample of convenience was recruited from 3 051 registered members at the 35 service centres. Only 625 members consented to participate. A cross sectional, descriptive research design was utilised to collect data on the characteristics of the service centres from the managers, using a modified self-

developed questionnaire. To explore the profile of members of the service centres, a self-developed questionnaire and two standardised questionnaires namely, World Health Organization Quality of Life-BREF (WHOQOL-BREF) and World Health Organization Disability Assessment Schedule II (WHODAS II), were administered.

Data analysis

Descriptive statistics were used to analyse the responses to the closed-ended questions in phases 1 and 2 of the study, and data presented as frequencies. Similarly, responses to the open-ended questions were summarised and themes were identified. In phase 1, quantitative and qualitative responses were analysed according to the WHO Active Ageing Framework. In phase 2, the data generated were analysed according to the WHO International Classification of Functioning, Disability and Health Framework (ICF) model.

Results

Services offered to members at the centres in the six categories of determinants of the AAPF included the following:

- *Health and social care systems* – Limited screening programs were provided as part of health promotion and disease prevention services.
- *Behavioural* – Physical activity/exercise programmes were most common, but no programs addressed healthy eating habits, tobacco and alcohol abuse, or adherence to medication use.
- *Personal factors* – Services were provided to enhance members' cognitive skills.
- *Physical environment* – No services were offered on falls prevention.
- *Social environment* – Different types of social support programmes were offered, including meeting education and literacy needs of members through the provision of Adult Basic Education Training (ABET).
- *Economic* – Some centres offered members opportunities for formal work and volunteering, while some provided income generation activities.

Most of the managers had high school education but expressed the need for training to manage these centres. The managers perceived the needs of the members would relate to health care, social support, inactivity, isolation and safety among others.

The summary of the profile of the 625 members of the centres are presented in the domains of the ICF model:

- *Personal factors* – The members were predominantly widowed women with a mean age of 74.1 ± 7.51 years (range 60–100 years). Most members displayed good lifestyle habits and engaged in various leisure and physical activities. Members were also satisfied with themselves, their health, bodily appearance and quality of life and reported a variety of aspirations for their future with and without possible future-orientated behaviours.
- *Health conditions* – Hypertension, arthritis and diabetes were the most common health problems reported by members for which they took medication. Falls were not common among members although the majority feared falling.
- *Body structure and function* – Most members expressed good cognitive function, could concentrate and follow conversations, and reported no hearing, visual or bladder problems. Members also reported good postural balance.
- *Activities and participation* – Members were satisfied with their abilities to do daily activities, participate in the community, and learn new tasks.
- *Environmental factors* – Most members resided with their children or family for various reasons, including needing care for themselves or to provide care to their children and/or extended families.

Discussion and conclusion

Using the WHO AAPF as a guide, it was found that services provided by Service Centres for Older Persons in the Western Cape, although varied, were deficient at most service centres. The managers responsible for providing these programmes were women with limited skills who needed more education and training to be able to manage the centres appropriately. The members of service centres, despite presenting with health challenges and multi-morbidities, indicated aspirations for the future. In view of the goals of the National Development Plan (NDP) to increase life expectancy of older persons to 70 years by 2030, a more comprehensive exploration of the profile of older persons will assist the managers of the Service Centres to respond more appropriately to the diversity of needs and interests of members.

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LIST OF ABBREVIATIONS

ABET	Adult Basic Education and Training
AIDS	Acquired Immune Deficiency Syndrome
CBO	Community Based Organization
CNCD	Chronic Non-Communicable Disease
CPOA	Cape Peninsula Organisation for the Aged
DSD	Department of Social Development
HIC	High income country
HIV	Human Immunodeficiency Virus
HREC	Human Research Ethics Committee
ICF	International Classification Framework
NDoH	National Department of Health
NDSS	National Department of Social Development
NDP	National Development Plan
OAHA	Old Age Home
PA	per annum
QOL	Quality of Life
SASSA	South African Social Security Agency
SC	Service Centre
SSA	Statistics South Africa
UCT	University of Cape Town
US	United States
USB	University School of Business
WC	Western Cape
WCPG	Western Cape Provincial Government
WCPT	World Confederation for Physical Therapists
WCW	Western Cape on Wellness
WHO	World Health Organization
WHODAS	World Health Organization Disability Assessment Schedule
WHOQOL	World Health Organization Quality of Life
YRS	Years

DEFINITION OF TERMS

Term	Definition
ABET	Basic Education and Training for adults who want to finish or improve their basic education, aiming to provide fundamental learning tools, knowledge and skills, and provides participants with nationally recognised skills and/or qualifications
Characteristic	A feature or quality belonging typically to a person, place or thing and serving to identify them
Child Support grant	An income provided to children who are under the age of 21 years and whose parents are unemployed or receive a low income jointly
Chronic	(of an illness) persisting for a long time or constantly recurring
Chronic non-communicable disease	A non-communicable disease (NCD) is a medical condition or disease that is non-infectious or non-transmissible. NCDs can refer to chronic diseases which last for long periods of time and progress slowly.
Civic	Relating to the duties or activities of people in relation to their town, city, or local area
Comprehensive	including or dealing with all or nearly all elements or aspects of something
Conceptual framework	An analytical tool with several variations and contexts. It is used to make conceptual distinctions and organise ideas
Disability grant	An income people receive due to their own disability, or if they were unfit to work or support themselves
Foster care grant	An income remunerated to carers for child care services they offer to children unrelated to them
Golden Games	An initiative of the Premiers Office in conjunction with stakeholders (Department of Social Development, Health and Sports and Recreation) introduced to older persons (aged 60 years and older) to encourage their participation in sports and recreation activities and become more physically active [1]
Health literacy	The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions
Iatrogenesis	Health problems that are induced by diagnoses or treatments
Non-residential	Not requiring or providing facilities for people to live on the premises
Population ageing	Population ageing refers to a process in which proportions of adults and the elderly increase in a population while the

Term	Definition
	proportions of children and adolescents decrease. As a result, the median age (the age at which half of the population is younger than the other half is older) increases in a country [2, 3]
Profile	An outline of something
Proportion	A part, share, or number considered in comparative relation to a whole
Quality of life	A standard of health, comfort, and happiness experienced by an individual or group.
Service centre	A service centre is an organisational unit which provides a specific service or product, or a group of services or products to users [4]

*Certain words are defined to provide clarity to the context of this research. The references to these definitions are provided in the thesis

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CHAPTER 1 INTRODUCTION

This chapter highlights the background to the study, the aims and objectives, and the significance of the study. A summary of the remaining chapters is also outlined.

1.1 Background to the study

The population of South Africa has increased noticeably from 40.6 million in 1996 to an estimated 56.5 million people in 2017 [5]. Approximately 28.9 million (51.1%) of this total population is female. The 45.7 million black African population is in the majority (81%), with the white population estimated at 4.5 million, and the coloured (mixed ancestry) and Indian/Asian population at 5.0 million and 1.4 million respectively.

Globally, populations are rapidly ageing with the number of older persons (aged 60 years and older) projected to double from just under 800 million currently, to reach 2 billion by 2050 [6, 7]. While this trend is most evident in the more developed regions of the world, less developed nations such as South Africa have also begun to experience significant population ageing. From 2.8 million (7.1% of the population) in 1996 to 4.6 million (8.1% of the population) in 2017 [5], South Africa is projected to be home to approximately 7 million older persons (aged 60 years and older) by 2030.

Differences in the aging patterns are apparent across the various population groups. The proportion of elderly whites has increased from 14.4% in 1996 to 23.4% in 2017. Among Indians/Asians, the proportion has increased from 6.4% in 1996 to 12.5% in 2017, while elderly coloureds grew from 5.8% in 1996 to 9.1% in 2017. The black African population grew from 5.7% in 1996 to 6.4% in 2017. The Western Cape Province also experienced growth in the number of older persons, from 301 942 in 1996 to 593 551 in 2017 [5].

Factors responsible for reshaping the age distribution of the population include fertility, mortality and migration [3, 8]. South Africa has the lowest fertility rate in Southern Africa as well as Sub-Saharan Africa [3]. In the Western Cape the total fertility rate is projected to decline from 2.18% in 2011 to 1.89% in 2040, meaning the proportion of older persons will grow [9]. Life expectancy is also increasing as people live longer due to improved medicine and lifestyles [8]. This translates into lower mortality rates and many older persons surviving

into old age. Despite being driven by higher mortality rates amongst young and middle-aged groups due to the HIV epidemic, the South African population will however continue to have an increase proportion of older persons in the total population [3, 10]. In addition, migration, though not the most prevalent driver of population ageing, impacts on the age structure of the population due to an influx of older age groups who move to the Western Cape Province for retirement [8].

To address the societal inequities in social and health care during the apartheid era in South Africa, the government developed the National Development Plan (NDP) 2030 as part of the transformation process [11, 12]. One of the plan's long-term goals is to raise the average life expectancy, currently at 64 years, to 70 years by 2030 [11].

The reported global trend in ageing is recognised as an opportunity and one of humanity's greatest triumphs [13]. Responding to this global trend, the World Health Organization (WHO) proposed the Active Ageing Policy Framework in 2002 to inform the actions taken by countries to address the needs of older persons [13]. While acknowledging the health-related challenges encountered in older persons, the active ageing policy framework aimed to reduce the risk of disease, and promote the maintenance of function, confidence and engagement that would contribute towards successful aging. The framework conceptualised active ageing as a process of optimising opportunities for health, participation and security to enhance quality of life as people age [14]. In 2003, the African Union Policy Framework and Plan of Action on Ageing was also formulated to support the WHO framework [15].

In line with global efforts, the National Department of Social Development formulated the South African Older Person's Act, 13 of 2006, for the protection of the rights of older persons [16]. The Act was geared towards the three priority areas of the WHO policy framework, namely older persons and development, advancing health and well-being into old age, and ensuring an enabling supportive environment. Since the framework was applied differently within various contexts, cultures and countries, the WHO recommended that its member countries should have, by the first half of the 21st century, evaluated the applicability and use of the framework to their countries. While studies to test the WHO framework have been carried out worldwide, there is scarcity of evidence on how the framework has been applied and how it represents the contextual issues of Africa, or South Africa.

Studies on ageing and health, including the WHO's study on Global Ageing and Adult Health [17] found that health, disability, living conditions and social support are concerns for ageing populations throughout the world, including South Africa [18-22]. Older persons are at high risk of ill health and disability originating from age-related, non-communicable diseases [23-25]. The incidence of disability and impairment is reported to increase with age, contributing to the loss of independence and isolation. In addition, there is the risk of multi-morbidity from causes such as heart disease, arthritis, falls, diabetes, hypertension, dementia, cognitive impairment, and depression, most of which are associated with lifestyle superimposed on physiological changes with age, and which may remain undiagnosed particularly in resource poor settings. Older persons also experience the impact of HIV/Aids, elderly abuse, poverty, and inadequate or undignified living conditions [3, 26]. All these occurrences inevitably result in an increased demand for chronic health care [18, 19, 27-29] as life expectancy increases. The need for formal care targeting older persons to ensure successful aging is therefore highlighted.

It was to deal with these aforementioned challenges that the concept of senior citizens' centres was first introduced in New York City in 1943, to provide educational and recreational activities to assist older persons in maintaining their independence in the community [30]. The centres offer communal care with the assistance of paid or voluntary caregivers in a setting outside the user's own home [31]. Members come or are brought to access the services that are available for at least 4 to 6 hours during the working day, and return home on the same day [32]. As a critical component of the aging continuum of care, service centres for older persons promote health and well-being by providing opportunities for recreation, socialisation, nutrition, health education and access to vital social services [28, 33-37]. Attendance at these centres has also been found to improve psychological wellbeing, satisfy social needs, improve friendships and stress levels and contribute to a positive perception of general health and wellbeing [33, 38]. Physiotherapists are in an ideal position to meet the needs of members of service centres and should, as recommended by the World Confederation for Physical Therapy (WCPT), deliver prompt and co-ordinated services that include promotion, prevention, treatment/intervention and rehabilitation [39]. In order to achieve this, physiotherapists should be available and accessible to members of the society,

regardless of their circumstances, who are experiencing or are at risk of experiencing limitations in their ability to function optimally [39].

Service Centres for Older Persons have become increasingly popular in South Africa [8]. Currently, however, the national database on the usage of these centres gives little information on how services are used or how many people use specific programmes. For example, the Western Cape alone has 200 registered service centres distributed across various districts and municipalities. These centres are financially supported by the Western Cape Department of Social Development (WCDS). However, despite the service centres having provided support services for many years, catering for a variety of needs in the population they serve, little information is available on the relevance of these services in meeting the needs of older persons in South Africa. Although it is known that membership of the service centres for older persons vary [40], organisational structures, designs and services provided in these centres have not yet been explored [8]. It is also uncertain how Service Centres for Older Persons in South Africa have been aligned with the WHO Active Ageing Policy Framework. Thus, undertaking an exploration of the Service Centres and their role in facilitating community-based care for the older person, in line with the WHO Active Ageing Policy framework, will be of great benefit in expanding the footprint of wellness and active ageing within the province and understanding how the population can successfully age in the country. Physiotherapists can participate in achieving active ageing of older persons at service centres by providing services that promote health and wellbeing of its members.

1.2 Aims of the study

To provide some preliminary data, the aims of this study were to explore

1. the characteristics of the service centres for older persons in the Western Cape, and
2. the profile of members of the centres.

1.3 Objectives of study

To achieve the first aim of exploring the characteristics of Service centres for Older persons in the Western Cape, the following objectives were set:

1. To determine the characteristics of the:

- 1.1 organisational structures of the centres;
- 1.2 types of services offered;
- 1.3 profile of the managers of the centres; and
- 1.4 the perceptions of the managers of the needs of the members of the centres.

To achieve the second aim of exploring the profile of the members of the service centres, the following objectives were set:

- 2. To determine the:
 - 2.1 socio-demographic profile of members of the centres; and
 - 2.2 the health and psychosocial characteristics of the members.

1.4 Significance of study

In South Africa, literature is sparse regarding specific needs-based service provision at service centres for older persons. Although clearly marked guidelines for Old Age Homes (OAH) exist [41], there are no documented guidelines on the services available to members in these service centres. It is suggested that to maintain the continued relevance and sustainability of service centres in our communities (e.g. Western Cape Province), a comprehensive assessment needs to be carried out on the characteristics, needs and interests of members at service centres [38, 40] as well as an evaluation of the service providers' role in addressing these needs in accordance with the AAPF recommendations. This study attempted to answer the following questions:

- 1. How are senior service centres being managed?
- 2. What are the service programmes being provided, and are the programmes informed by the WHO AAPF?
- 3. Do the programmes cater for the diverse health and social related needs of their members? And
- 4. Is there a link between the characteristics of members of the centres and services provided in the centres?

The results of this study will inform the development of needs-based health-related interventions and programmes for members of service centres in the Western Cape, to which physiotherapists can make a significant contribution.

1.5 Outline of chapters

Chapter One describes the foundation of the study. It outlines the background, the aims and objectives of the study, the research setting and the significance of the study.

Chapter Two includes the conceptual framework for the study, highlighting the use of the Active Ageing Policy Framework (AAPF) within the International Classification Framework (ICF) to evaluate older persons and provide a holistic overview of the members of the service centres for older persons. This chapter outlines the context of older persons in South Africa with specific reference to the province of the Western Cape. It includes an in-depth literature review highlighting current literature on worldwide population ageing, focusing on specific trends in South Africa. It further informs about international and national legislation and policy frameworks on ageing, and how they address the challenges confronting older persons globally and in South Africa. Finally, this chapter attempts to introduce service centres as valuable community-based organisations that facilitate active ageing and cater for the needs of the ageing population.

Chapter Three presents the methodology of the study. Since this study has two phases, this section highlights both the research design and the research setting. The sampling, instrumentation and procedure for data collection, management and data analysis are reported on in detail for each phase. Ethical considerations are also briefly explained.

Chapter Four presents the results of the study. The results for phases one and two of the study are presented individually in terms of demographic characteristics of the sample and outcome measures administered.

Chapter Five presents the discussion which attempts to interpret the results of the study by assessing each of the six determinants and the accompanying list of focus activities aimed at achieving the goals of active ageing. This chapter also discusses how far the service centres are aligned with the WHO framework on active ageing.

Chapter Six concludes and summarises the main findings of the study from phase one and phase two. The limitations of the study are included in this chapter. Recommendations are suggested for similar studies in the future.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter presents the conceptual framework for this study, highlighting the Active Ageing Policy Framework as it focuses on the health, participation and security of older persons. The conceptual framework also highlights the International Classification of Functioning, Disability and Health, and how it provides a holistic overview of the members of the service centres for older persons. Furthermore, this chapter outlines the context of older persons in South Africa with specific reference to the Western Cape Province. The chapter also includes an in-depth literature review which highlights current literature on worldwide population ageing, while focusing on specific trends in South Africa. It further informs about international and national legislation and policy frameworks on ageing, and how it addresses the challenges confronting older persons globally and in South Africa. Finally, this chapter attempts to introduce service centres as valuable community-based organisations that facilitate active ageing and cater for the needs of the ageing population.

Literature searches on EBSCO, Medline/PUBMED, CINAHL and PEDRO databases were used. Keywords used to identify relevant literature included: senior services centres, senior clubs, service centres for older persons/elderly, health of older persons/elderly, health challenges of older persons/elderly, quality of life of older persons/elderly, International Classification of Functioning, Disability and Health Framework, Active Ageing Framework, conceptual framework, global health, pillars of active ageing, population ageing.

2.2 Conceptual framework for the study

The WHO AAPF and the ICF were adopted as the conceptual framework informing the primary research aims of this study, in exploring (a) the characteristics of the service centres for older persons in the Western Cape, and (b) the profile of members of the centres.

2.2.1 Active Ageing Policy Framework

The AAPF was adopted as the conceptual framework to inform the first phase of the study – the exploration of the characteristics of the service centres for older persons. The concept of active ageing was introduced by the WHO in 2002 and was defined as ‘the process of

optimising opportunities for health, participation and security in order to enhance quality of life as people age' [13]. The framework focuses on three major goals, namely older persons and development, advancing health and wellbeing into old age, and advancing enabling and supportive environment. This framework therefore allows people to realise their potential for physical, social, and mental well-being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance. The AAPF is a policy vision that recognises and emphasises the economic and social difficulties older persons face as well as their need for health care. It also emphasises traditional community care and support mechanisms and the decentralisation of health, welfare and social services. In addition, it supports the voluntary contributions of older persons to community-based initiatives and access to adequate recreational and leisure facilities [13].

As active aging is influenced by a number of factors that surround individuals, families and nations [13], six inter-related determinants were identified which may contribute to the quality of life of older people [13, 42] (Table 2.1). Each determinant has a list of focus activities aimed at achieving the three goals of active ageing (health, participation and security). However, it is not yet known whether service centres for older persons provide these listed activities within their service programmes.

The AAPF is proposed to inform discussion and formulation of action plans that promote healthy and active ageing, and to provide guidance on designing and implementing policy and programmes that promote the rights of older persons [15], similar to what is expected from service centres for older persons. It was recommended that by the first half of the 21st century, WHO member countries should have evaluated how applicable the 2002 framework is to their countries. The Active Ageing Framework model is a concept that helps explain the linkages between activity, health, independence and ageing well. Despite many countries introducing the model recommendations into their national health and social plans of action, there is little evidence to support its application in South Africa. Since government has established service centres to enhance the achievement of the framework, it is important to know what the structure is like to understand what they need to do. Using this framework allowed for the evaluation of service centres in how they support active ageing of older persons (members) living in communities.

Table 2.1: Overview of the active ageing determinants (WHO, 2002)

Determinants	Items
<i>Health and social care systems determinants</i>	Health promotion & disease prevention Curative services Long-term care Mental health services
<i>Behavioural determinants</i>	Tobacco use Physical activity Healthy eating Oral health Alcohol Medications Adherence
<i>Personal factor determinants</i>	Biology and genetics Psychological factors
<i>Physical environment determinants</i>	Physical environments Safe housing Falls Clean water, clean air and safe foods
<i>Social environment determinants</i>	Social support Violence and abuse Education and literacy
<i>Economic determinants</i>	Social protection Income Work

Studies testing the WHO framework have been carried out worldwide, including in Thailand and Indonesia [43, 44], Britain, Portugal, Finland and Belgium [42, 45-49], the USA, Canada [50, 51] and Brazil [52]. Studies were also carried out in many Caribbean countries such as the Bahamas, Barbados and Jamaica [53] as well as in New Zealand [54]. However, there is little evidence to report on how the framework has been evaluated in African countries [14].

The Older Persons Act, 13 of 2006, provides for the set-up of community-based facilities [16] like service centres for older persons to focus on the three goals of the framework. This research study therefore offers opportunities to explore if the services provided by these service centres for older persons are informed by the WHO framework.

2.2.2 International Classification of Functioning, Disability and Health Framework

The ICF was adopted as the conceptual framework to inform the second phase of this study, which aimed to explore the profile of older persons who were members of service centres. The ICF was originally developed to bring about a paradigm shift in the way health and disability were understood and assessed [55]. Rather than continuing to present disability as a medical issue, the ICF identified multiple dimensions of human functioning, namely biological, psychological, social and environmental. Developed over a seven-year period in an inter collaborative process and validated by means of field trials in over 70 countries, the ICF was officially endorsed by all WHO member states in 2001.

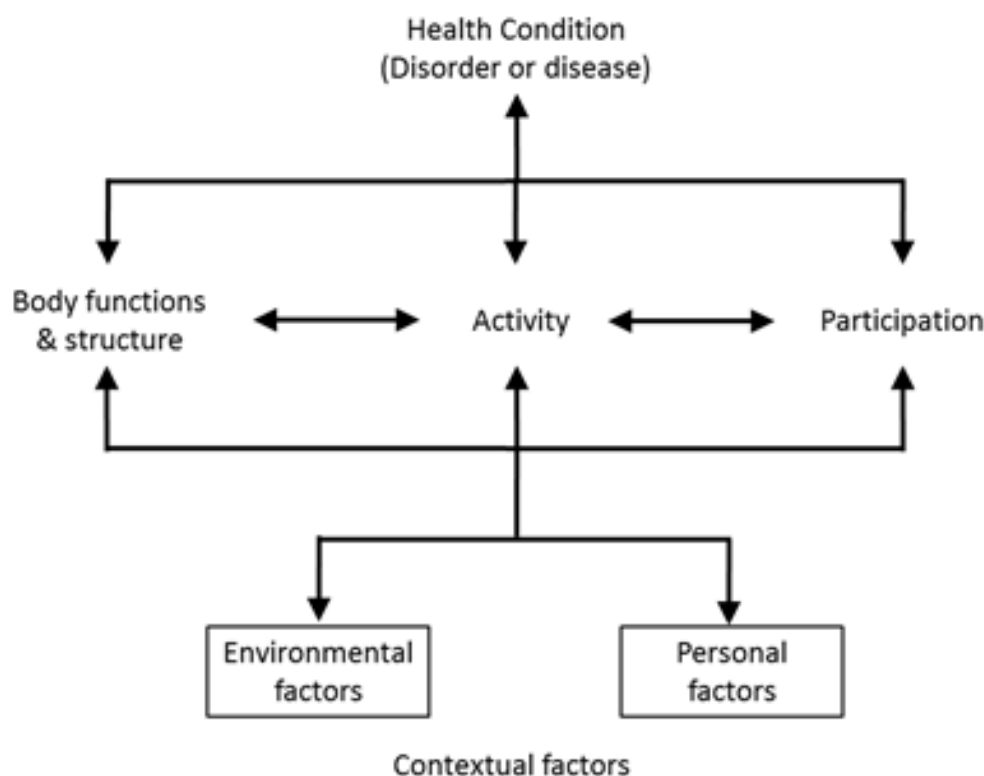


Figure 2.1: Graphic representation of the interaction between components of the ICF

(WHO 2001, 13, p.18)

However, apart from classifying and providing a framework for understanding disability, the ICF has also been developed to evaluate people holistically in relation to their disability [56]. The ICF looks beyond the physical impairments of individuals, recognising that functioning, disability and quality of life are not only the consequence of biological dysfunction but are a result of the interaction between the health condition, biomedical factors, and the social,

personal and environmental factors (Figure 2.1), including the performance of activities and participation in life situations [57]. Exploring functioning in these contextual factors allows for a greater understanding of the whole person depending on the individual's circumstances.

The ICF has been used for multiple purposes and in different settings [55]. It has been used as a tool to enhance clinical reasoning and reflection in clinical practice [58], and in assessing functioning and disability in persons with disability [59]. In research studies of older persons, the ICF has been utilised to create a better understanding of factors associated with self-rated health [60], understanding challenges encountered by older persons in the community [61] and highlighting the importance of capturing and understanding both frequency and restriction aspects of older persons' participation [62]. Despite many global studies being done using the ICF with older populations [63], there is little evidence available to report on its use within this cohort of people in South Africa.

Since the WHO encourages active and healthy ageing of older persons, the ICF was thus adopted as the framework in phase 2 of this study to provide a holistic overview of the members of the service centres for older persons. This could ensure that interventions and services at service centres, as recommended in phase 1 of this study, would address the needs of the members holistically.

2.3 Defining an older person

The definition of ageing can differ widely from a traditional or a community perspective. In most developed countries, the age of 60 or 65 years is said to be the beginning of old age, whereas the more traditional African definitions of an 'elderly' person correlates with the chronological ages of 50–65 years, depending on the setting, region and country [2]. However, since defining ageing is arbitrary, it introduces problems of data comparability across nations. For this reason, the United Nations, although not having adopted a standard criterion, generally uses 60+ years to refer to the older population [2]. Following a change in legislation via the Social Assistance Amendment Act, 6 of 2008, South Africa aligned itself with the WHO's (WHO, 2009) definition of the 'elderly' as all persons over the age of 60 years [10, 64].

2.4 Population ageing

2.4.1 *Global ageing trends*

World populations are rapidly ageing. It has been shown that the ageing of populations is ongoing in both developed and developing countries although, the growth rate of older adults in low- and middle-income countries remains significantly higher than in most high-income countries for many decades [65, 66]. The United Nations Population Division projects that at a global level, the number of people aged 60 years and older will double from just under 800 million today (representing 11% of the world's population), to just over 2 billion in 2050 [6]. It is also estimated that by 2045, more people will be aged 65 years and older than children under 15 years of age [67].

2.4.2 *Ageing in Africa*

According to Dotchin, Akinyemi, Gray and Walker (2013), nearly two-thirds of the world's population aged over 60 years are living in developing countries [67]. However, African countries are also undergoing a transition and experiencing the fastest growing older population of any world region [24]. It is estimated that the African population aged 60 years and older will increase from 42.6 million in 2010 to 160 million by 2050 [24]. This means that by 2050, most countries in Africa would likely see a doubling in their ageing populations [68].

2.4.3 *South Africa's older population*

The South African population is no exception; it is set to experience significant ageing in the coming decades [7]. The mid-year estimates (2017) produced by Statistics South Africa (SSA), show that South Africa's population is estimated at 56.5 million people, an increase of 6.7% since 2011 [5]. South Africa has one of the most rapidly ageing populations in Africa and has the continent's highest percentage of older inhabitants [23, 69]. The proportion of persons 60 years and older in South Africa is growing, having reached approximately 4.6 million (8.1%) in 2017 [5]. Variations in age are particularly noticeable by population group in South Africa. Between 2002 and 2017, the proportion of elderly among black Africans increased by 0.5%, among coloureds by 2.7%; among Indian/Asians by 4.2% and among whites by 7.3% [5]. Disparities in ageing by province and population group have a historical context that can be traced to fertility, mortality and migration streams over time [5] and are indicative not only of

a country that is on a demographic and health transition, but are also an alert to the new social, health and financial demands South Africa is bound to face.

There is tremendous diversity in national and societal contexts in which aging unfolds in Africa [68]. Fertility, mortality and migration are the key processes responsible for reshaping the age distribution of the population. Persistent lowered fertility brings about declines in births, which, in turn, result in declining proportions of children and an increase in the number of older persons [69]. Mortality declines as living standards improve and people have better access to nutrition, hygiene, sanitation, better medical care and access to public health services. This also translates into a higher life expectancy [3]. However, the experience of ageing in Sub-Saharan Africa, specifically South Africa, has to some extent been driven by higher mortality rates due to the HIV/AIDS epidemic [3]. The ageing of South Africa's population will occur despite the increased HIV -related mortality as the country is experiencing a decreased fertility rate and an increased mortality rate among young and middle adult age groups, which contributes to the increased proportion of older persons in the total population [3, 8, 10]. Though not the most prevalent driver of population ageing, migration also contributes to the age structure of the population.

2.4.4 Ageing trends in the Western Cape

Although there were variations in the distributions of populations across provinces in South Africa, evidence indicates a 10.3% increase in the total population of the Western Cape between 2007 and 2011 [3]. According to provincial mid-year estimates for 2017, 11.5% of South Africa's population live in the Western Cape [5]. The Western Cape Province also experienced growth in the number of older persons (60 years and older), from 301 942 in 1996 to 593 551 in 2017 [5], and it has the highest proportion of older persons in comparison to other provinces [5]. According to SSA (2017), the Western Cape mid-year population estimates describe a predominantly female population of older persons since the life expectancy of females is higher than that of males [5].

2.5 International and national responses to population aging

2.5.1 *Goals of international intervention*

The international response to ageing has been guided by a number of United Nations and WHO initiatives [65], some of which offer a framework for monitoring and evaluating the health and well-being of older persons, as well as service delivery to them [70]. Active ageing was established as the leading global policy strategy in response to the aging global population [47, 50, 71] when the WHO proposed the AAPF [13]. These strategies were taken by countries to address the needs [13] and recommend health policy for old people to be implemented through national health plans globally in the 21st century [65]. This is discussed further when describing the use of the AAPF.

In 2003, the African Union Policy Framework and Plan of Action on Ageing was also formulated to support the WHO framework [15] by emphasising the economic and social difficulties older persons encounter and their need for health care. Both these policy plans encouraged action to sustain the independence of older persons in the community and reduce the placement of older persons in institutions by introducing support mechanisms to strengthen partnership between government and civil society, as well as to decentralise health, welfare and social services [8].

According to the WHO (2002), active ageing is expected to facilitate the association between activity, health and ageing well. Active ageing encompasses six groups of determinants that are influenced by culture and gender [13] as illustrated in Table 2.1. According to the WHO AAPF [13, 50], the key concepts of active ageing are autonomy, independence and quality of life as defined in Figure 2.2. Quality of life is a broad ranging concept, incorporating the complex aspects of personal beliefs, psychological state, physical health, social relationships, level of independence and relationship to features in the environment [72]. As people age, their quality of life is largely determined by their ability to maintain autonomy and independence [50]. A healthy life expectancy (i.e. how long people can expect to live without disabilities) also affects active ageing [50].

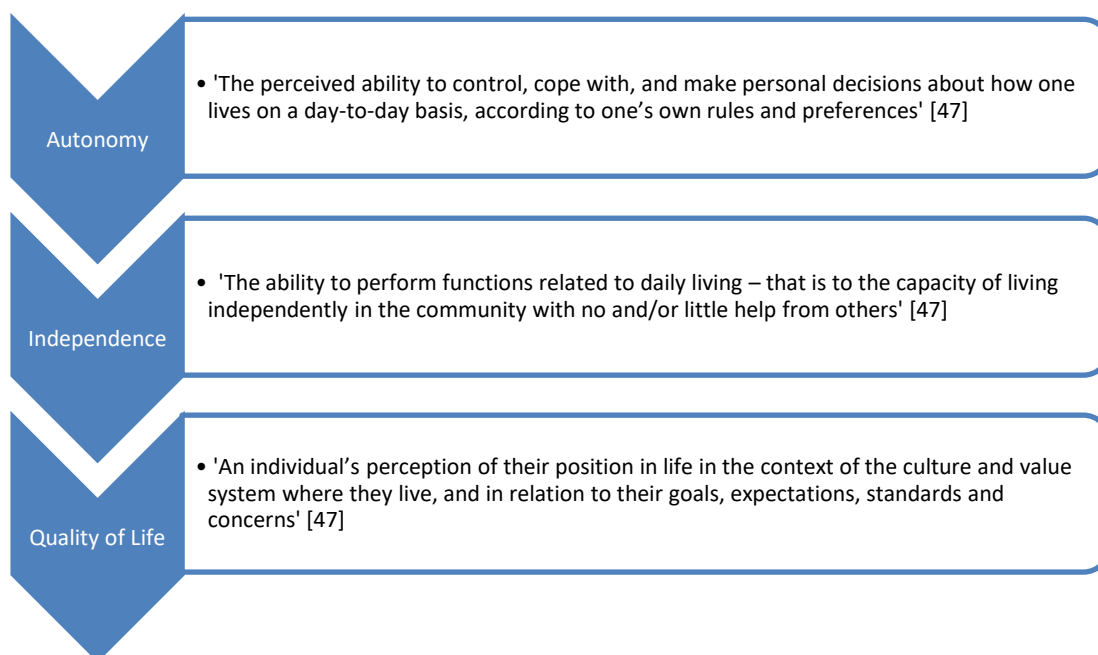


Figure 2.2: Key components of active ageing (WHO, 2002)

Active ageing is part of a policy vision in which guaranteeing of human rights will enable the increasing older population to remain healthy (thus reducing the burden on health and social care systems) and to stay in employment longer (thus reducing pension costs), while participating fully in community and political processes [73]. It refers to the entire life-course [14, 44], thus policies which foster activities and environments associated with health are encouraged to increase quantity and quality to life years, enhance autonomy and independence, and reduce health and care system costs. This also reflects the recommendation made by Walker (2002), that individuals have a duty to take advantage of lifelong learning and continuous training opportunities, and to promote their own health and wellbeing throughout the life-course [74]. In addition to health, the social participation and security of older persons are also important aspects of the lives of older persons. Participation entails optimising activities related to enabling environments that promote community and civic engagement [75]. Policies and programmes should therefore aim to increase the paid and unpaid productive contribution older persons can make to society [73]. In addition, the framework also highlights the aspect of security of living. This includes activities designed to ensure that the social, financial and physical needs are met as people age [75]. Studies done to test if these policies are followed are discussed later.

The AAPF is more relevant in Europe than in the USA. In the USA, researchers seem not to use the concept promoted by the WHO and prefer to use the concept of 'successful ageing' when

referring to ageing well or optimal ageing [50]. The concept is also often used interchangeably with notions such as quality of life and healthy aging [51]. Concepts of 'active ageing' overlap with those of 'successful' ageing [76]. Medical perspectives of successful ageing incorporate mental and physical health and functioning while psycho-social definitions emphasise reaching one's potential, psychological and social well-being, life satisfaction, adaptation, productivity, self-mastery and control [76]. Other studies build on the WHO definition of health and define successful ageing as 'arriving' at a level of physical, social, and psychological well-being in old age [76].

Fernandez-Ballesteros *et al.*, (2013) define successful ageing (active ageing), similarly to Rowe and Khan (1997), as a low probability of illness and disability, high physical fitness, high cognitive functioning, positive mood and coping with stress, and being engaged with life [48]. The differences between this model and the AAPF are that it focuses on psychological aspects such as cognition and mood and omits security. According to Belanger *et al.*, (2017), the inclusion of security in the concept of active ageing allows for the recognition that conditions of poverty and violence in many countries of the world are barriers to active ageing since lack of financial security or personal safety hampers quality of life of older persons [51]. However, the results of their study did not validate either the WHO model of active ageing or the psychological model by Fernandez-Ballesteros *et al.*, (2013). It is thus recommended that at policy level, indices following the WHO model of active ageing need to highlight what remains to be improved about the health, social participation, and social and economic security of growing populations of older adults [51].

The concept of active ageing, similarly to other ageing concepts, has been criticised. It is believed that the extent to which active ageing has been promoted as the ideal strategy for global ageing is oversold and may be counterproductive [77]. In addition, the term 'active' itself may be misconstrued, reducing policy actions to focus on physical activities at the expense of other important aspects of the model [73]. According to Doh and Adusei-Asante (2016), 'active' might also be regarded as an extension of social determinants of health, reducing national-level policy actions to health promotion and prevention [71]. Furthermore, Boudiny (2013) observed that given the nature of the concept of active ageing, much of the debate has focused on the economic aspects of 'active', without significant recourse to the overall framework [78]. The emphasis has been on employment, health, pension, retirement

and citizenship, while there should be differentiation among different types of productive activities such as work, volunteering and caregiving, and types of leisure activities, including physical, intellectual, religious and social activities [51]. Developing a measure of the extent to which older adults feel involved in activities that are meaningful for them may also represent a better variable to capture social participation [51]. However, despite the lack of conceptual clarity on active ageing, studies that examined alternative concepts reported that active ageing remains the most popular [71], and concluded that elders from different cultures appear to agree on most of the components identified in the literature [48].

Active ageing approaches and strategies are promoted worldwide [44, 74, 75, 79] with many studies applying the AAPF to assess the active ageing of older people [14, 42-44, 75], either by focusing on their current situations or on ways to promote active ageing [43]. Paul, Ribeiro and Teixeira (2012) tested a model using the determinants of active ageing proposed by the WHO. Their analysis failed to confirm the WHO conceptual model as some of the determinants were found to be intertwined. Although subjective and objective variables contribute to active ageing, Paul, Ribeiro and Teixeira (2012) concluded that psychological factors play a larger role in their data than acknowledged in the WHO model [50]. Fernandez-Ballesteros *et al.*, (2008) criticised the analysis of the study by Paul, Ribeiro and Teixeira (2012) for proposing a measurement model based on the determinants of active ageing rather than on indicators of the concept [51]. According to Paul and Teixeira (2012), the exclusive use of self-rated measures in this study may have led to an overall 'perceived reality', while some of the active ageing determinants are to be more objective [50]. However, despite finding a variation in profiles of active ageing between context and cultures, it could still be used to guide specific community and individually based interventions [50].

A study conducted by Doh and Adusei-Asante (2016) compared experiential active ageing with the WHO model and found important variations between the two. Revealing eight clear dimensions to the meaning of experiential ageing (i.e. social interaction, happiness, activity, physical health, independence, spiritual health, public safety and work/employment) with varying levels of contribution, this study found participation to be the most important aspect of the model. Participation is a function of social interaction, and social interaction is the most critical component of active ageing [71]. In practice, however, participation tends to be the least promoted. In this study, the concept of activity (i.e. both physical and social), was the

second most important aspect of active ageing, whereas the health dimension of experiential active ageing is a perfect fit with the health pillar of the WHO model [71].

Despite countries modelling their national policy responses on the WHO model proposal, there has been limited discussion on the theoretical validity and application of the concept of active ageing within the African context [71]. The researcher located only one study conducted by Mapoma (2014), where the 2002 WHO AAPF was assessed as to how it applied to developing countries in Africa, using the determinants of active ageing. It was highlighted that the context in which determinants were used in developed countries is very different from the African setting. The study was thus modified by removing the determinant of physical environment to suit the needs of the population; it also included HIV/Aids within the active ageing framework. Mapoma (2014) confirmed that countries with a generalised HIV/Aids pandemic will see an impact on the active ageing of their citizens [14]. It is thus necessary that specific roles of each determinant within the AAF need to be clarified and specified, and the interactions between the determinants in the active ageing process need to be better understood.

Similarly, a study conducted in Thailand by Chansarn (2012) assessed the active ageing of elderly people over 60 years by investigating the determinants of active ageing in accordance with the WHO's framework [43]. However, due to the limitations of the data, the determinants of active ageing were modified in this study so that they were appropriate to the availability of data and the study objectives. Family factors were included as a determinant since the distinct culture of the older participants in this study relied heavily on family. The findings of this study highlighted a moderate level of active ageing among the elderly and recommended that to promote active ageing, public policies needed to promote work, family and community participation of older persons [43].

Active ageing is a concept that lacks consensus as researchers who attempted to validate conceptual models of active ageing have obtained mixed results [51]. The results of a study by Belanger *et al.*, (2017) found no empirical support for the acceptance of either the WHO model or the psychological model of active ageing, whereas Mapoma (2014) reported the WHO AAF as applicable despite it overlooking the influence of HIV/Aids on the ageing process. In spite of the differences in opinion on what active ageing entails, due to its multi-dimensional facets,

it is believed that the WHO's definition still presents a holistic, life course-orientated approach to population ageing [80, 81]. Although there is little evidence to report on how the Active Ageing Framework has been evaluated in African countries [14], the context matters when adopting global policies on ageing, where older persons cannot be grouped to receive the same services [71]. The African context is unique, and it needs to be acknowledged that Africa is experiencing a demographic transition that will affect the needs of its citizens. It is therefore important to ascertain the extent to which the framework represents the contextual issues of Africa [71].

It is clear from the literature that the model of active ageing proposed by the WHO, including its determinants, is applied differently within different contexts, cultures and countries. However, there is limited research on the use of the AAPF with older persons in South Africa as research tend to focus mostly on leisure activities [82]. To the researcher's knowledge, one study aimed to use the active ageing approach to explore the experiences of older persons in retirement villages [82]. However, this study did not fully apply the AAPF and was based on a psychological and theoretical perspective. This study was further limited as the participants were chosen based on being functionally well (i.e. older persons who did not have any limiting cognitive challenges and who were physically mobile), which led to the marginalisation of frail older persons and their experiences of active ageing. According to Arifin, Braun and Hogervorst (2012), active ageing policies are addressed to all older persons including those who are sick, disabled or retired, so they, regardless of their health status, can continue to be allowed and encouraged to contribute to families, friends, communities and nations [44]. Researchers have thus highlighted the need for research on the situation of older persons on the African continent to address the challenges associated with the ageing population [83, 84].

2.5.2 National intervention to population ageing

Ageing of populations in sub-Saharan Africa, including in South Africa, is unfolding in contexts of widespread economic strain where older persons are vulnerable to detrimental health outcomes [24], are often marginalised and their needs not prioritised in policies, programmes, funding and research [83]. Their rights are also not accorded the attention they deserve [16]. However, the South African government is becoming increasingly sensitive to the consequences of ageing of its population and is aware that the average life expectancy of its

citizens will continue to increase [68]. This has implications for the services that need to be provided for a diverse older population, many of whom have specific needs [20].

As part of the transformation process to address the inequities of the past, the government developed the NDP 2030, among others, tasked with protecting the growing proportion of elderly in the country, catering to their social, economic and general well-being [11, 12]. The aim of the NDP is to eliminate disparities between racial groups in terms of socio economic status, occupation, education, housing and health through the design of comprehensive programmes [85]. One of the goals of the plan is to improve the health and wellbeing of the population across all population groups, and raise the average life expectancy, currently at 64 years, to 70 years by 2030. Other aspects of the NDP deal with aspects of health systems strengthening.

Furthermore, in line with global attempts, the National Department of Social Development formulated the South African Older Person's Act, 13 of 2006 [86], to protect the rights of older persons [16]. The Act is geared towards the WHO policy framework and provides a comprehensive framework to advance the rights of older persons, create mechanisms of protection, put in place structures of support in the community and generally ensure that the welfare, rights and interests of older persons are advanced [16]. The WHO framework on Active Ageing [13] also informed the development of the Western Cape Province's Wellness programme [87], providing the necessary guidelines to achieve the NDP goals. The purpose of the Western Cape's Wellness programme initiative is to promote a healthy lifestyle movement in the Western Cape by advocating and activating physical activity and healthier eating to prevent and reduce the burden of non-communicable diseases using a settings-based approach in the workplace, school and community [87].

2.6 Community-based care for older persons

Community-based care assists older persons to live independently in their homes and maintain or enhance their quality of life. This care is delivered by a range of providers including public health, social services, private or non-profit organisations, and service centres [88]. Similar to Senior Citizens Clubs in the developed world, service centres for older persons are set up in communities to provide a platform for reaching and engaging seniors, and services that will enhance the achievement of the goals of the WHO framework on Active Ageing.

2.6.1 International senior citizen's centres / clubs

The concept of Senior Service Centres was first introduced in New York City in 1943 with the purpose of connecting older adults to critical services and supports, and to serve as a place to connect them to each other and to people in their community [34]. Service centres are popular global community structures in the United States, Northern Europe, Britain, Australia and Asia among others, which follow their own service models specific to their needs [32, 40, 89]. However, in the last few decades, many have attempted to expand their programmes and services to meet the needs of the rapidly changing population. [40].

2.6.2 Description of service centres

Service centres, depending on their size, budget and programmatic focus, range in scope from recreation clubs or nutrition sites, to traditional community-based senior centres and large, multi-purpose centres [28]. According to Turner (2004), a multi-purpose senior centre is a community facility that delivers a broad spectrum of services, including health, mental health, social, nutrition and educational services, and recreational activities for older individuals [90]. Service centres are defined as 'a community focal point on aging where older persons as individuals or in groups come together for services and activities which enhance their dignity, support their independence and encourage their involvement in and with the community' [91]. According to Boen *et al.* (2010), service centres are organised as small, local units for activity and social contact; they have a small staff of two to four people and are run mostly by volunteers [89].

Organisational structures, design and service offerings are diverse at these facilities [37, 40, 92] and vary according to regions (e.g. urban/rural/suburban) and populations served. They are often also dependent on the size and source of funding [93]. Service centres vary in the number of members and in the amount of staffing that support programmes. In the United States, some service centres are public, others are privately owned, while some are housed within other organisational structures [90]. Although it is imperative that leadership profiles and organisational philosophies are considered, limited studies have been conducted profiling senior centre leaders [37]. In the United States, leaders of service centres are known by various titles including administrators, directors, executive directors or programme managers [37]. In a study by Paradasani and Sackman (2014), administrators reportedly held their

positions at the service centre for between 3 and 10 years or more. Most senior centre directors were Caucasian females with college degrees, with a small sample having postgraduate qualifications. Since it was reported that administrators without a college-level degree may have impaired leadership abilities; the need for training in leadership, outcome evaluations, fundraising and public advocacy was identified [37].

In contrast, Rosenberg (2013) highlighted two models of service centre organisational structures in Australia [32]. The committee model, which is more commonly associated with service centres, lends itself to the annual election of key organisational positions that are hierarchical in nature. The limitation of such a structure is that it creates conflict between members and the committee resulting in tension that may hinder member participation [32]. The non-committee model refers to a minimum organisational club structure that is member led, and where subgroup activities have member 'convenors', which allows for socialization and community participation. However, it is limited in its ability to deal with organisational problems due to lack of procedures. Given that this study by Rosenberg (2013) was a qualitative study, no profiles of individual committee members were provided. However, irrespective of the structure of the organization, committed volunteers may leave because they have burnout or feel taken for granted because the workload is not spread evenly amongst them [32].

2.6.3 Services available at service centres

Community services have been criticised for wasting resources and providing poor outcomes due to its fragmentation [88]. However, service centres serve as delivery sites and play a vital role in providing a wide range of opportunities for health, social, recreational and educational services for older adults in maintaining their independence in the community [30, 38, 40, 90, 94, 95]. These include opportunities for socialisation, nutrition, health education and access to vital social services [28, 33-37]. In addition, service centres provide opportunities for volunteer development, advocacy, information and referral, and preventative care through home visits, which serve as a supportive service to prevent older persons' dependence on institutional care [40]. They also provide meals, transport, skills training, religious activities, shopping, care management and health screening [96]. Specific health programmes and services focus on health and fitness, physical activity, exercise and functioning to improve

balance, co-ordination and muscle strength [89, 93]. These are evidence-based and professionally supported to include health promotion programmes in the form of workshops, screening for chronic non-communicable diseases (CNCD), testing and interventions that enhance the wellbeing of participants [92, 93].

2.6.4 Benefits of service centres

Service centre programmes enhance psychological wellbeing, satisfy social needs, improve friendships and stress levels, and contribute to a positive perception of health and general wellbeing [93, 97]. Participants also report lower levels of loneliness, higher levels of life satisfaction and a better quality of life [89, 96]. Members' involvement and participation in activities at service centres may reinforce their feelings of competence and improve their self-esteem [95]. It was reported that members were more satisfied when volunteering for activities in the community and at service centres [93]. According to Paradasani and Thompson (2012), support received through advice from friends and staff at a senior centre was directly linked to positive perceptions of health among members. Furthermore, structured health, wellness and nursing programmes offered at service centres increase members' social support, improve diet and nutrition, and enhance their perception of general health [93].

Service centre programmes also potentially address pain problems in older persons who participate in programmes that involve strengthening, flexibility, endurance and balance training [36]. Further studies highlighted by Marhankova (2014) report that service centres enable individuals to create an alternative structure of daily life, extend their social networks, and develop lifestyle choices that were previously not possible due to work and family responsibilities [97].

However, a literature review by Dal Santo (2009) revealed only a small number of studies document the importance of this type of service. Most of the studies were cross-sectional analyses that were unable to demonstrate the long-term impact senior service centres have on the lives of older adults. Despite this, senior centres abroad, like in the United States, continue to redesign and reconceptualise their organisations to meet the challenges of the new millennium, identifying new and emerging models for these centres where programme characteristics and structures are evolving and becoming clearly defined in relation to

changing needs and user characteristics [93]. Furthermore, studies by Pardasani and Thompson (2010) reveal that service centres in countries like the United States have clearly defined accreditation guidelines to ensure services at these centres are in accordance with the needs of their members. According to Western Cape Department of Social Development (WCDS) (2015), no standards or norms guide the activities of service centres in South African legislation and policy, thus centres may be offering services that have little or no relevance to the needs of older persons [8].

According to Hostetler (2010), although senior centres will continue to service older persons functioning at different independence levels, services may become bifurcated which will compound the problem posed by already excluding seniors in need of assistance. It is also identified that individuals who staff these service centres most likely also play an important role in their management since their discourse and visions may animate their work [98]. In their study, Pardasani and Thompson (2010) yielded valuable information about the changing needs and expectations of community-dwelling older adults and concluded that despite the diversity of programming at senior centres, without innovation and change, membership will remain limited to a specific segment of the older population [38].

2.6.5 Challenges faced by service centres

Despite providing valuable services to the community, service centres experience many challenges which threaten their relevance and existence. These include budgetary constraints, lack of staff, transport and space, as well as the need for physical improvements in the centres themselves (e.g. redesigning and building of modern facilities). In addition, service centres also lacked high quality programmes and sufficient health and fitness activities [37]. According to Rosenbaum, Sweeney and Massiah (2014), the confluence of physical design elements of a senior centre (e.g. outside appearance, furniture, ambient conditions) and social elements within the centre (e.g. patron-to-patron and patron-to-employee interaction during activities) can have a therapeutic effect on a patron's well-being [25]. With additional funding, service centres would be able to hire more qualified staff who would be able to offer more diverse programming, as well upgrade and maintain the physical environment. There is, however, limited data on how reliant senior centres are on public funding as most service centres supplement their income budgets through private fundraising [37, 95]. It is not known yet if a

similar trend could be identified in South African service centres. However, according to the WC DSD, it appears that centre-specific fundraising activities are an important source of income for many centres in the Western Cape [8].

Senior centres are also facing a decline in attendance of members [37, 94, 96, 99]. Although some service centres generally have few members, full attendance and participation of membership cannot always be guaranteed as the elderly face many challenges in their communities, such as lack of transport, ill health, lack of income, lack of interest in programmes offered [93, 100] and negative stigma associated with attendance [37, 101]. Many service centres battle a negative social stigma associated with being at service centres mainly for the frail elderly, rather than places for active older adults [98]. However, MaloneBeach and Langeland (2010) report that a decline in membership is not necessarily due to lack of interest or negative attitudes [96]. Often older persons may be age eligible but not in need of the services provided [96, 102], or language and/or cultural barriers are identified as reasons for not accessing service centres [102]. They also reported that attending to activities such as cleaning, shopping and other household duties affected members' attendance [8].

According to Dal Santo (2009), older adults most interested in joining a shared interest group at service centres were more highly educated, lonelier and younger [103]. However, 'younger' seniors, also referred to as 'baby boomers', are not entering the senior centre network at the same rate as their older cohorts are exiting the system [37, 96]. Baby boomers are younger and more active adults who were born between 1946 and 1964 [95]. They present with different needs and demands for services to the current cohort of older adults and have a wide range of life experience and expectations for their future. Furthermore, they have higher levels of education, higher incomes, and are more affluent and less prepared for retirement. They also do not attend due to stigma of socialising with significantly older people and perceive service centres to be welfare programmes [102]. If current trends continue, baby boomers will live longer, healthier lives than earlier cohorts [96]. According to Fitzpatrick and McCabe (2008), the baby boomer generation is now turning 65 years old and it is expected that they will live well into their nineties [95].

According to Pardasani (2010), lack of participation at service centres has also been found to be directly affected by variables such as gender, income, marital status and contact with friends [99]. Despite reasons for lack of attendance and participation of members, to ensure the success of service centres in the future, there has to be a balance when attempting to meet the needs of future generations of older adults, while still meeting the needs of the current generation of older adults [34]. According to Walker *et al.* (2004), centres are criticised for not doing more to reach older persons who are frail, of low income or disabled [101]. Despite this, studies indicated that the success of service centres nonetheless ensured older persons lived longer in their communities [92, 93].

2.6.6 Senior service centres in South Africa

The concept of service centres has extended beyond global borders [32, 89, 92, 93] and has become increasingly popular in South Africa. Partnerships between government, private sector, civil society, non-governmental and community organisations, families and communities [19, 64] have been developed to establish service centres to cater for the needs of older persons.

The South African government, in line with international policy and legislation, has adopted the Active Ageing Policy Framework [13] in addressing the needs of its ageing society. Through the National Department of Social Development (DSD) Programme for Older Persons, the government aims to provide programmes that maintain and support services for older persons in the Western Cape [8]. It is recognised that home- and community-based services, such as service centres, remain essential components in allowing older persons to continue living independently in their homes and communities. Thus, through meaningful participation in programmes and activities based on the three components of the Active Ageing policy framework (health, participation and security) at these service centres, government hopes to promote active ageing, social engagement, improved wellbeing and quality of life of older persons in the province [8].

According to the WCDSO, although models of service centres in developed settings are challenging to apply to the South African context, some service offerings within these models can be applied locally. With improved networking and collaboration, strategic partnerships (e.g. Department of Health and Department of Social Development) can ensure the

development of diverse programmes to facilitate active ageing. It should be noted that independent and assisted living, and community-based care initiatives are not mutually exclusive. Older persons who reside in independent or assisted-living facilities are still able to access services [9].

In 1995, there were 385 registered service centres in South Africa [104]. Currently, national data is not clear, but the Western Cape has 200 governmental registered service centres distributed across various districts and municipalities [8]. The WCDSD's Older Persons Programme currently supports the provision of community-based care and support services through funding the non-profit organisations (NPOs) that manage these service centres.

Considering the impact that population ageing may have on the provision of services at service centres, the WCDSD, in 2015, conducted a study evaluating service centres for older persons in the Western Cape to determine the effectiveness and relevance of these centres in meeting the needs of older persons residing in the community. In addition, it also explored existing management models and service delivery approaches in terms of their efficacy [8]. The sample, selected purposively, consisted of 20 service centres geographically situated in the Cape Winelands and Overberg, and metro South areas of the province. Using a mixed-methods approach whereby both quantitative and qualitative data collection techniques were combined, secondary data was collected using semi-structured and structured interviews, semi-structured focus group discussions, and a panel discussion session. This study however, did not contextualise its findings within the AAPF as recommended by the WHO.

According to the findings, the services offered at service centres varied between centres, from daily, structured programmes to provision of a meal delivery service. A number of centres had no structured continuous programmes although they offered outings, exercise, workshops, and other activities as and when available, which included spiritual services, foot care, crafts, health services, awareness activities, reading and writing, cultural and social activities, and support groups [8]. Centres were also involved in certain 'special events' throughout the year. The staffing and organisational structures varied with approximately half of the sample classified as formal organisational structures with criteria and processes in place, whereas some smaller centres with fewer staff were informal. Although some centres employed permanent and part-time staff, most centres were reliant on volunteers, whose roles and

numbers varied widely [8]. Despite the national norms and standards for acceptable levels of services to older persons stating that organisations must have a recruitment programme and selection and appointment criteria for staff and volunteers, few services centres complied with this regulation [8].

Based on its findings, the WCDSD (2015) reported that managers and staff perceived service centres to play a significant role in the lives of members. Managers and staff therefore provided valuable information on purpose. However, there was little consistency between centres about management and staffing, capacity, funding and infrastructure. It found that although services and activities offered to members varied between centres, overall, members were satisfied with the services they received. Furthermore, this study highlighted challenges faced by older persons in the community, as well as challenges faced by service centres in addressing these challenges. Despite this, the study lacked representation and could not be generalised to the broader Western Cape Province since the sample was not randomly selected and only two of the province's six service delivery regions were included in the study. Furthermore, the sampling of members was not standardised across service centres, which could have introduced an element of bias in the results. Despite these limitations, this study identified that a more comprehensive needs assessment of service centres between regions in the Western Cape needed to be done to compare against available services to see where and how the service footprint needs to be expanded [8].

2.7 Service centre participants / members

Studies conducted at service centres in mostly Western countries describe the typical profile of a senior centre participant as mostly 70 years and older (the majority being between 75 and 84 years) [89, 90, 93, 99], single or widowed, living alone with medium to low income, minimum disabilities, lower levels of participation at lower and higher levels of education, and few work, caregiving or parental responsibilities [8, 37, 99, 103]. However, there were exceptions found in studies where the majority of participants at the centre were under 70 years [8, 105]. Women were also far more likely to participate in senior centres than men as they have a higher life expectancy, longer lifespan and are more likely to be interested in the group activities provided they meet their needs [89, 90, 95, 97, 99, 105, 106]. An explanation for this difference may be that women's recreational orientation is closer to the core activities

and social climate of the senior centre than men's more individual activity orientation [89]. In contrast, a study by Lai (2008) reported that men or younger respondents use senior centre services more. Furthermore, despite previous findings indicating that poor physical and psychosocial health results in a higher level of service use [89], Lai (2008) reported healthier respondents use more services [94]. Studies on race and ethnicity of members of service centres yield contradictory results, where some studies found that race was not a significant predictor of member participation, while other studies revealed that race does affect membership, and that minorities are generally less likely to participate in or utilise service centres [99]. In terms of religious affiliation, a study by Walker *et al.* (2004) found the more individuals participated in faith-based activities, the more likely they were to participate in the service centre, and do so more frequently [101]. Many studies found that most members lived alone, while others lived with a spouse, children, relatives or friends [90, 95, 106]. In contrast, Lai (2008) reported only 9% of members lived alone [94].

Challenges confronting older persons

Older populations are at high risk of ill health and disability originating from age-related CNCD [23, 24]. CNCDs like hypertension, diabetes type 2, high cholesterol, obesity, tobacco use and alcohol abuse account for 43% of the global burden of disease [23, 70]. In a study by Sviden (2004), participants of service centres reportedly experience disease or injury related to falls and had at least one medical diagnosis (e.g. arthritis, heart disease, neurological disease, diabetes etc.), with some reporting multi-morbidity [107-109]. Some members also had vision and hearing impairments, were frail in health or cognitively impaired [103]. According to Boen *et al.* (2010), both men and women reported memory impairments, while women with osteoporosis had high use of service centres [89]. Furthermore, members also reported high levels of perceived physical dysfunction, but better psychosocial functioning with a higher level of participation in social and leisure activities [107]. However, in a study by Kirk and Alessi (2000), more than half the participants in their study indicated that although they took part in social activities, they were somewhat lonely [106]. This suggests that participation in leisure activities by older persons does not necessarily ensure psychological wellbeing [106]. Despite having many health problems, many members reported that their current health conditions did not greatly affect their quality of life, and that they were satisfied with their lives [106, 110].

In addition to health challenges, older persons are faced with a lack of comprehensive health services, have poor social support and altered family structures, poverty, elderly abuse and low health literacy [35, 68, 111, 112]. The impact of HIV/Aids and poor living conditions are also still major problems facing current generations of older people across the globe [35, 68, 111-113], including South Africans [26] attending service centres [8]. According to a study by Samaad (2012), pensions and social grants were inadequate, yet members relied solely on this main source of income for households headed by older persons [84]. Thus, combined with the high cost of living and lack of accommodation in relation to their income, the elderly often rely on meals provided at service centres [8].

2.8 Integrated care approach at service centres

As people age, they are entitled to enjoy a healthy, safe and fulfilling life where they actively participate in social, cultural and political arenas within their societies, as well as contribute productively to the economy of their countries. The setting and programmes traditional senior centres offer therefore need to be considered in light of the changing face of the aging population [34].

According to Fitzpatrick and McCabe (2008), traditional senior programmes require updating to match the changing demographics [95]. In the United States, consultation among government, communities and older persons is already under way to determine the needs of older adults, and how service centres should be defined to better address the needs of an ageing population [96]. Suggestions include modernising age-segregated centres and marketing them as ‘Health and Wellness Centres’, ‘Vital Aging Centres’, or ‘Senior Spas’, which would involve revamped programming to include health, wellness and fitness classes, personal trainers, financial and retirement seminars, counselling, café dining and coffee houses, and culture and travel services [34]. In addition, the establishment of intergenerational community centres allows for ‘ageless’ activities and services for older adults that can be provided outside centres and within the community. These activities can also allow for ‘virtual senior spaces’ to enable older adults to connect through websites, chat rooms, discussion forums, online training and telephone health assessments [34].

There is no evidence of transformation and modernisation of service centre use in South Africa. The Western Capes’ provincial government will therefore have to plan for the rapid

increase in the number of older persons [114] since ageing populations present a major challenge to health care, long-term care and geriatric care systems. An expected increase in chronic morbidity and disability means government also needs to improve the standard of health care given to older persons by providing for appropriately trained health care staff and informal carers [70]. However, when older persons are able to remain in their homes and communities, stay active and engage socially, their health and general well-being is heightened, which results in savings in health care expenditure [115, 116]. It is thus important to explore the factors that would contribute to the attainment of the goals of the AAPF and NDP, and to investigate whether these inform the services provided at service centres for older persons.

2.9 The role of physiotherapy in facilitating active ageing

Clinical and public health efforts aimed at prevention, detection and management across the life course are the solution to the health care needs of a growing older population [117], and according to the AAPF, should be based on the rights, needs, preferences and capacities of older persons [13]. The WCPT also advocates for member organisations to work with legislative and regulatory bodies and service providers (such as service centres) to incorporate certain principles into their national planning and programming for older people [39]. Physiotherapists form an integral part of the multidisciplinary team [118], and are in an ideal position to promote health and wellbeing of members to reach their aspirations and overcome chronic diseases. The aim is to increase independence in daily activities and enable members to age in place, be active and participate socially and in society [118], as well as limit decline in the physical function of the older person [119]. Physiotherapists should therefore be available and accessible to older persons, including members of service centres who are experiencing or at risk of experiencing limitations in their ability to function optimally, regardless of their circumstances [39]. According to the WCPT (2017), physiotherapists should provide prompt, co-ordinated services that include promotion, prevention, treatment/intervention and rehabilitation of older persons [39]. Physical therapists can reduce risk factors and prevent and treat non-communicable diseases by providing education, prescribing physical activity and exercise, and performing non-invasive, hands on interventions consistent with a bio-psychosocial paradigm [120]. Furthermore,

physiotherapists should partner with other health care practitioners to ensure that health promotion interventions are co-ordinated and reinforced across all health care encounters so that individuals feel supported and care is co-ordinated rather than disjointed [120]. It is therefore useful for physiotherapists to seek opportunities to fill gaps in their knowledge and skills related to promoting health and wellness of older persons. However, according to Ramklass *et al.*, (2010) there is no evidence of co-ordinated geriatric content for physiotherapy curricula within South African academic physiotherapy programmes [26]. It is therefore imperative that physiotherapy curriculum developers identify core competencies and instructional strategies appropriate for the South Africa's ageing population with diverse contexts of care [26].

2.10 Summary of literature review

Globally, populations are ageing in both developed and developing countries. It is estimated that by 2045, there will be more people aged 60 years and older, and by 2050 it is estimated that 160 million of those will live in Africa [24]. African countries are experiencing the fastest growing older population in the world [24] with South Africa having the continent's highest percentage of older inhabitants [23, 69].

In response to population ageing, a global active policy framework has been developed to optimise opportunities for health, participation and security of older persons to enhance their quality of life as they age [13]. Active ageing encompasses six groups of determinants that are influenced by culture and gender [13], thus the framework is applied differently within different contexts, cultures and countries. It is expected that member countries of the WHO should have evaluated the applicability of this framework to their countries by the first half of the 21st century. While studies to test the WHO framework have been carried out worldwide [42-45, 49-54], there is scarce evidence on how the framework has been applied within the African context [14]. The African context is unique, and it needs to be acknowledged that Africa is experiencing a demographic transition that will affect the needs of its citizens. It is therefore important to ascertain the extent to which the framework represents the contextual issues of Africa [71]. Despite the criticism of the framework regarding the lack of conceptual clarity on the profiles of active ageing between context and cultures, it was still recommended

for use to guide specific community- or individually-based interventions for older persons [50] and it is supported by the African Union Policy Framework and Plan of Action on Ageing [15].

Many of the current generation of older persons in South Africa lived their earlier lives amid the challenges that apartheid imposed [121]. Ageing of these populations is undergoing widespread economic strain where older persons are vulnerable to poor health outcomes. Thus, as part of the transformation process to correct the inequities of the past, the government of South Africa developed the NDP (2030) [11, 12] with the goal to improve the health and well-being of the population across all population groups, and raise the average life expectancy to 70 years by 2030.

Service centres, global community structures [32, 40, 89] that serve as focal points in connecting older adults to other people in their communities, have gained popularity in South Africa. The Western Cape Province has 200 registered service centres for older persons set up in communities to provide services to enhance the achievement of the WHO AAPF goal. Services provided include opportunities for health, nutrition, social, recreational and educational services for older adults [30, 38, 40, 90, 94, 95], in addition to volunteer development, advocacy, religious activities [64]. Information, referral and preventative care through home visits, shopping and health screening are also offered [96]. Furthermore, service centre programmes are reported to enhance psychological wellbeing, satisfy social needs, improve friendships and stress levels, and contribute to a positive perception of health and general wellbeing [93, 97]. Members thus report lower levels of loneliness, higher levels of life satisfaction and a better quality of life [89, 96]. However, service centres are faced with many challenges including budgetary constraints, lack of staff, transport and space, as well as the need for physical improvements to buildings and facilities. In addition, service centres also lack high quality programmes and sufficient health and fitness activities [37]. It is not known yet if a similar trend can be identified in South African service centres.

Since an increase in life expectancy is anticipated in addition to the growing generation of older persons, it is important to explain factors that contribute to the attainment of the goals of the NDP to inform services provided at service centres. In South Africa, however, there is little evidence on guidelines and specific needs-based service provision at these service centres. It is unclear how service centres are being managed, what service programmes are

being provided and whether the programmes cater for the diverse needs of members. Service centres provide valuable support for community dwelling older persons. To ensure relevance and impact, it has become necessary to assess the changing needs and interests of members, and whether programmes are informed by the WHO AAPF. This comprehensive assessment will enable the design of new and relevant models of service centres in the Western Cape that cater for the specific programme needs of their members. Physiotherapists can make a significant contribution to the provision of these programmes at service centres and need to create an awareness of the value of their profession.

CHAPTER 3 HMETHODOLOGY

3.1 Introduction

The procedure for data collection, management and analysis are described in detail in this chapter. The study consisted of two phases.

3.2 Research setting

Service centres in South Africa are run under different management systems and some privately-owned centres are not registered. Service centres for this study were accessed through a list provided by the Western Cape Provincial Department of Social Development (WCDSD), as these could easily be located within communities. The WCDSD's Older Persons Programme currently supports the provision of community-based care and support services through funding the non-profit organisations (NPOs) that manage these service centres.

Information from the Western Cape Provincial Department of Social Development (WCDSD) listing (inclusive of NGO run service centres) suggests that about 200 senior service centres for older persons are registered with the WCDSD [122] and are distributed in unequal proportions across the five districts and the Cape Metropole (Table 3.1). These service centres were the focus of this research study.

The external environment creates a context from which service centre operate. Service centres were found in towns in the Cape Metropole and various district municipalities. Some areas focused on administration, agriculture and tourism, while others were old mission settlements, fishing villages and rural inland settlements. The provision of infrastructure, resources and service provision to its communities therefore differed and were influenced by the socio-economic status of the area.

Table 3.1: Population distribution of older persons in the Western Cape (2011)

District	Estimated total number of older persons	Estimated number of service centres
West Coast	35 977	31
Cape Winelands	62 995	12

District	Estimated total number of older persons	Estimated number of service centres
Overberg	31 510	43
Eden	66 169	40
Karoo	6718	6
Cape Metropole	317 304	68

(Department of Social Development, 2013)

3.3 Selection of participating service centres

Inclusion of service centres

For participants to be included in the study, service centres had to be registered with the WCDS. Managers had to give consent for the selected service centre to participate.

Exclusion of service centres

Service centres not on the list compiled by the WCDS were excluded. Service centres were also excluded if managers refused consent for the service centre to participate, or if managers gave consent but service centres closed down prior to the data collection process.

All service centres (n=200) registered with the WCDS were eligible to participate in the study. These centres therefore served as the study population (Table 3.1).

Sample size was based on the proportion of service centres per district in the Western Cape. Using large sample sizes increases the possibility of obtaining statistically significant results and maximises external validity and reliability [123]. However, while high power is always desirable with increased sample sizes, there were trade-offs in this study relating to the number of service centres and individuals that could be feasibly studied, given time constraints and limited human and financial resources.

To accommodate for these limitations, the researcher chose to accept a margin of error of 15%. Using a sample size calculator (STATCALC version 7.2.0.1), the following parameters were entered to determine the sample of service centres required:

- (a) Population size = 200 (the total number of service centres across all districts)
- (b) Expected frequency = 50 (based on the assumption that 50% of service centres would respond positively) [124]
- (c) Acceptable margin of error = 15% (a larger margin of error is acceptable where there is feasibility constraints)
- (d) Design effect = 1
- (e) Clusters = 1.

Based on these parameters, it was calculated that for a power of 95%, 35 service centres in total from the five districts and the Cape metropole were needed for this study.

Accommodating for non-participation

As participation was voluntary, it was anticipated that not all service centres would be willing to participate in the study [123]. To accommodate for non-participation, an additional six service centres (one from each district) were selected to participate in the study. The proportion of the sample (i.e. service centres in each district) that participated in the study was thus calculated based on 41 service centres, which represented an estimated proportion of 20.5% of the total population.

Calculation of sampled service centres

To ensure that service centres in each district had an equal chance of being represented, a proportional stratified sample was utilised by separating the 200 service centres according to the districts and the Cape Metropole in which they were located [123].

Based on the 41 service centres, the expected proportion of participating service centres was calculated using the following formula:

Total number of service centres in a district / Total number of service centres in the Western Cape

E.g. 31 (West Coast) / 200 (Western Cape) = 0.155

This proportional value was then multiplied with the selected sample size of service centres (n=41) to calculate the number (sample) of service centres to be selected for participation for that specific district (Table 3.2).

E.g. $0.155 \times 41 = 6.355$ selected service centres (West Coast)

The selected number of service centres from each district included in this study is listed in Table 3.2

Table 3.2: Sample size calculation for service centres and managers

District / Cape Metropole	Proportion of service centres	No. of service centres to sample
West Coast	0.155	6.35 (6)
Cape Winelands	0.060	2.46 (3)
Overberg	0.215	8.81 (9)
Eden	0.200	8.2 (8)
Karoo	0.030	1.23 (1)
Cape Metropole	0.340	13.94 (14)
Total proportion of SC WC (including additional 6 selected)	100%	41

SC = service centre; WC = Western Cape

Selecting the participating service centres

The names of all service centres were documented on individual pieces of paper. These pieces of paper were folded and placed in a box. Random selection affords the greatest possible confidence in the sample validity because it produces samples that most accurately reflect the population's characteristics [123]. An individual independent to this study randomly selected from the box the proportional representative number of service centres to participate in the study. This process was repeated for each district and the Cape Metropole until the sample of service centres was identified (see Figure 3.1).

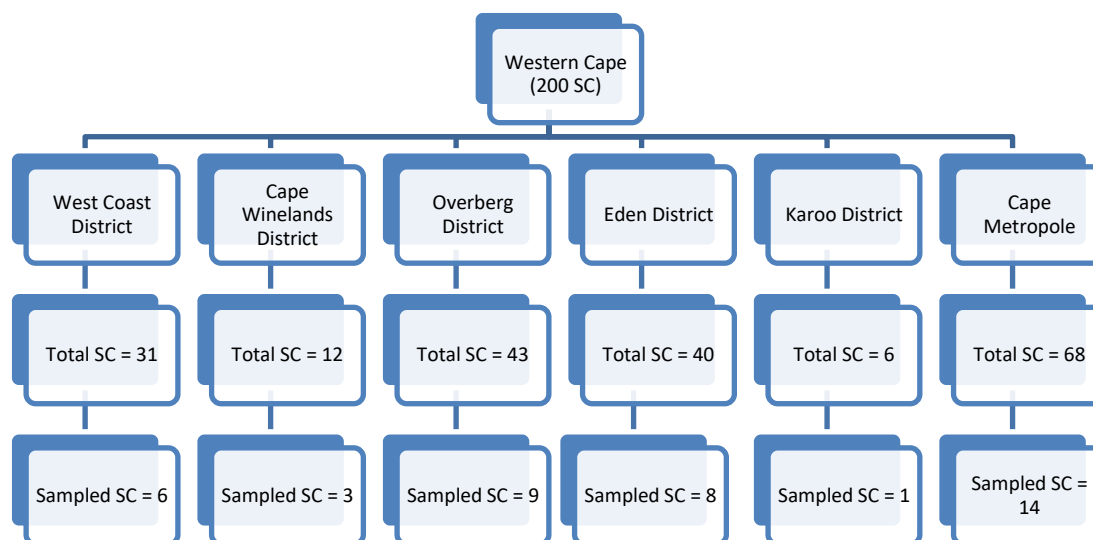


Figure 3.1: Distribution of sampled service centres in the Western Cape (2011) before exclusion criteria was applied

SC = service centre

3.4 Research design

A cross sectional, descriptive research design was utilised to collect data on the characteristics of service centres (phase 1) and service centre users (phase 2) in the province. This design is considered appropriate as it allows for conclusions to be drawn about the research population and the various subgroups within the larger group without altering conditions [123].

3.5 Phase 1

3.5.1 Aim

The aim of phase 1 of this study was to explore the characteristics of the Service Centres for Older Persons in the Western Cape.

3.5.2 Selection of participants

Once the service centres had been selected in each district, the managers of these centres (Figure 3.1) formed the sample of participating managers in phase 1 of this study.

Inclusion of managers

Managers of selected service centres had to understand English, Afrikaans or isiXhosa to respond to questions in the self-administered questionnaire.

Exclusion of managers

Despite giving consent for the service centre to participate, if managers did not give consent to participate as individuals, they were excluded from the study.

3.5.3 Description of data collection instruments

A modified self-developed questionnaire (Appendix 10) was administered to managers of service centres to determine their profiles and the characteristics of the service centres.

Modified self-developed questionnaire for managers

This questionnaire consisted of 37 questions. The purpose of this questionnaire for service centre managers was to capture their demographic information (date of birth, gender, marital status), level of training and perceived needs of the members. It was also used to capture specific information relating to the service centre characteristics, which included information on the service establishment, demographic location, the organisational structure and its affiliation. The structure and support for service programme delivery (including human and financial resources) was also surveyed, as well as whether services were provided in the context of the preferred language used commonly at the centre. The questionnaire also gathered data on membership profiles and characteristics.

This questionnaire was developed by adapting and modifying a validated questionnaire used in an earlier study by Casteel *et al.*, (2013) [92]. In that study, the original questionnaire was developed to capture availability of health and wellness programmes in service centres, including programmes that target the leading cause of death among older adult populations. It was also designed to collect information on organisational characteristics of programme delivery, including information on the individuals responsible for programme delivery and the agencies that support programme planning.

The adaptation to the questionnaire by Casteel *et al.*, (2013) involved the addition of new questions (i.e. question 12, 14, 27, 29, 32, 33, 34 and 37 in Appendix 10), as well as a complete

change or minor alterations to questions to ensure relevance to the South African context. The questionnaire contained mostly closed ended questions, but also included some open - ended questions. Closed-ended questions required the members to select a category of response that best reflected their opinions. Open-ended questions provided the opportunity to gather qualitative responses to questions (Appendix 10). The modified questionnaire was reviewed by an expert in gerontology who was involved in the Fall Prevention and Education Program by the Department of Physical Therapy, Bouve College of Health Sciences, North Eastern University in the United States of America. The questionnaires were piloted before commencement of the study to test appropriateness of items and to correct any ambiguities.

3.5.4 Procedure

Training of fieldworkers

To complete the study within the specific timeframe, four fieldworkers were recruited and trained to assist with data collection. The fieldworkers, two of whom had a tertiary qualification, were unemployed members of the community recruited via referrals from colleagues and friends. Fieldworkers acted as interpreters and translators as they were able to speak and understand either isiXhosa or Afrikaans, in addition to English. This accommodated participants' various educational levels and prevented misinterpretation of answers, incompleteness and bias, as supported in a study by Nedjat *et al.* (2008) [125]. Fieldworkers provided their written informed consent to assist with the study and completed a form that informed them about the confidentiality of participant responses (Appendix 15).

Fieldworkers participated in a full-day training workshop conducted by the researcher and were provided with an 'orientation' file containing documentation and forms relating to study procedures. The training programme included practice sessions and role play interviews to support their skills training and ensure the accuracy of procedures and data collected. During the training programme, the process of administering the questionnaires, time frames to complete interviews and methods of delivering the interview questions to the participants were discussed, clarified and standardised. All documentation (including questionnaires, consent forms and information letters) were reviewed and the terminology required in the translation process clarified and agreed upon.

Pilot study

A pilot study was conducted at two independent service centres for older persons in the Cape Metropole that were not registered with the WCDS. The pilot study was used to test the study instruments; determine the suitability of language usage, length of sentences and clarity of questions asked; and test the time spent on completing the questionnaires, as supported in a study done by Conn *et al.* (2010) on the surveying process of instruments [126].

All questionnaires were administered by the face-to-face interview method by the researcher and fieldworkers. The modified self-developed questionnaire was tested on one manager at each service centre, giving two managers who participated in the pilot study. This questionnaire was administered twice to determine inter-rater reliability. Since service centres were only open certain days of the week, permission was granted to the researcher to conduct a second interview that took place within 7 days of the initial interview. Participants were interviewed by a different fieldworker.

The WHO (2018) recommends that during pre-testing (as in the pilot study), participants should be asked about any word they did not understand as well as any word or expression that they found unacceptable or offensive in the questionnaire, and choose which word conformed better to their usual language. In addition, translators should always aim at the conceptual equivalent of a word or phrase, not a word-for-word translation, i.e. not a literal translation. They should consider the definition of the original term and attempt to translate it in the most relevant way [127]. The interviews for the pilot study were conducted in English or Afrikaans depending on the language preference of the participants. For dual language speakers, interviews conducted in English sometimes required translation of some words into Afrikaans. Due to these translation requirements, more time was needed to complete the questionnaire. It was determined during the pilot study that minor changes to the wording in the self-developed questionnaire for managers were necessary to clarify unclear questions.

The following ambiguities in questions within the manager questionnaire were amended as follows: In question 18, the word 'previously' was included to read 'Has this person been previously involved in managing a facility or facilities similar to that of senior centres?'. An option 'not sure' was also included in the answer to this question. In question 35, the options given as potential answers were grouped in a more organised manner (for example, health

checks, education, exercise programmes, social security etc.) and numbered. Data collected from this pilot study was not included in the analysis of the main study since the sample did not meet the inclusion criteria. In addition, the questions were modified prior to the main study.

Recruitment of service centres and managers

Utilising the list obtained from the provincial DSD, individual sampled service centres were contacted by post/fax/email or telephonically as appropriate (Appendix 5). The written support for the study obtained from the National DSD (Appendix 3) and the research procedure was provided to managers at the service centres (Appendix 6) to ensure that they were familiar with the study. When permission to conduct the study was obtained from individual service centre managers, the service centre was recruited for participation in the study.

All 35 managers at the selected service centres who fulfilled the inclusion criteria and provided consent were then eligible to take part in phase 1 of the study.

Data collection

Data was collected over 7 months from December 2014 to June 2015. The managers of individual sampled service centres were contacted via either post/fax/email and/or telephonically regarding the commencement of the study. Service centres were open on certain days of the week only and visits required extensive travelling. Data collection thus proceeded once suitable dates, times and venues for data collection had been negotiated with the managers of service centres. Data collection for managers and members of service centres was conducted on the same day for each specific service centre, except for one manager.

On the day of data collection, the manager of each centre provided a tour and description of the facility and introduced the researcher and fieldworkers to the members. A meeting was then held with the manager of the service centre for which managers were requested to select their language of preference. The purpose and logistics of the study were explained. The managers' voluntary participation in the study was requested and written informed consent obtained (Appendices 6, 7).

Data from managers was collected by the researcher or fieldworker in face-to-face interviews in a quiet, comfortable area at the centre. To ensure procedural accuracy, the fieldworkers were afforded the opportunity to observe the researcher conduct initial interviews with participants. They could ask questions pertaining to the data collection processes thereby obtaining clarity through answers provided. Once the researcher was satisfied that they had understood what was required, the fieldworkers assisted with the collection of data. Throughout this process, the researcher continuously checked procedures and the data collected to ensure a quality assured process.

Due to limited time and resources, six managers requested to complete the questionnaires in their own time as opposed to having a face to face interview. However, managers responses to the questions were clarified and checked prior to submission of the questionnaire. One manager completed the questionnaire electronically and was given the opportunity to clarify questions with a follow-up telephonic interview. The interviews with managers took an average of 15 to 20 minutes to complete depending on translation requirements and level of clarification required.

After interviews were conducted, the researcher facilitated debriefing sessions with the fieldworkers and addressed unforeseen challenges. The researcher continued to be available to all fieldworkers throughout the data collection period, addressing their queries and concerns as they arose. After completion, questionnaires were handed in to the researcher for safekeeping.

3.6 Phase 2

3.6.1 Aim

The aim of phase 2 of this study was to explore the profile of members of service centres in the Western Cape.

3.6.2 Selection of participants

All members attending the selected service centres in phase 1 were eligible to participate in the study and served as the study population (Table 3.3). A sample of members (service centre users) was recruited from each of the selected service centres.

Table 3.3: Population distribution of service centres in Western Cape (2011)

Districts	Total no. of members at participating service centres*
West Coast	1 894
Cape Winelands	1 065
Overberg	3 293
Eden	3 750
Karoo	410
Cape Town Metropole	4 900
TOTAL	15 312

Source: <http://www.westerncape.gov.za/directories/facilities/859>

The researcher used a non-probability sample of convenience as it was uncertain how many members would be available to participate on the day data was collected. Since 20.5% of service centres were proportionally selected (based on the total sample of 41 SC in phase 1) from various districts and the Cape Metropole (Table 3.1), it was estimated that approximately 3 139 ($15\,312 \times 20.5\% = 3\,138.96$) members would participate in the study. The researcher made every effort to ensure maximum participation from members.

Participating members were therefore volunteers recruited based on their availability and willingness to participate in the study. These volunteer members formed the sample for phase 2 of the study.

Inclusion of members

Members were included if they attended the selected service centre and could give consent to participate in the study. Members had to understand English, Afrikaans or isiXhosa to respond to questions in the self-administered questionnaire.

Exclusion of members

Members younger than 60 years and those who did not give consent to participate in the study were excluded. In addition, members who were not present on the day of data collection and members who spoke a language other than three indicated in the inclusion

criteria were excluded. However, members who had impaired hearing or poor eyesight were not excluded from participating in this study.

3.6.3 Description of data collection instruments

A self-developed questionnaire (Appendix 11) and two standardised questionnaires namely, WHOQOL-BREF and the WHODAS II (Appendices 12 and 13) were administered to all eligible participants.

Self-developed questionnaire for members

This questionnaire consisted of 47 questions, the purpose of which was to gather information on the socio demographic profiles, the psychosocial and health characteristics of members of service centres, as well as their perceived health needs. In developing this questionnaire, questions were used from a questionnaire survey in a study conducted on fall prevention and education by the Bouve College of Health Sciences at North Eastern University in the United States [128], as well in a study conducted by Bertera (1999) (Appendix 14) [129].

The questionnaire used in the study by Bertera (1999) was designed to obtain basic information about the perception of health promotion needs and interests of seniors. It also aimed to identify interest in activities that have been found to be important in promoting the health of seniors, encourage seniors to think of health promoting activities and indicate their level of interest in each. The study by Murphy and Lowe (2013) highlighted the use of questionnaires that aim to collect data that represent core items needed for a comprehensive assessment of older persons receiving home care services [128]. It also measured their outcomes and assisted with outcome-based quality improvement in care planning for the older person.

The self-developed questionnaire used in this study contained questions that related to the profile characteristics of members and included personal information pertaining to gender, marital status, socio demographics, education, employment and financial background. Also addressed were questions on family support, current state of health and disability, medication adherence, risk of falls, and health and fitness activities. The questionnaire contained both closed- and open-ended questions. Closed-ended questions required the members to select a category of response that best reflected their opinions while the open-ended questions

provided the opportunity to gather qualitative responses to questions (Appendix 11). This questionnaire was reviewed by an expert in gerontology who was involved in the Fall Prevention and Education Program by the Department of Physical Therapy, Bouve College of Health Sciences, North Eastern University in the United States of America. The questionnaires were piloted before commencement of the study to test appropriateness of items and to correct any ambiguities.

WHOQOL-BREF questionnaire for members

The World Health Organisation Quality of Life (WHOQOL-BREF) questionnaire, an international cross-cultural comparable instrument [130-132], was used to assess the quality of life of the members of service centres. It also assessed the members' perceptions of their physical health, psychological health, social relationships, and environment in the context of their culture and value systems, their personal goals, standards and concerns [133]. This questionnaire is an abbreviated 26-item version of the WHOQOL-100, which was developed using the field-trial version of the WHOQOL-100. The researcher decided to use the WHOQOL-BREF questionnaire as it is shorter, practical, and more suitable for older persons [134].

The WHOQOL-BREF questionnaire used in this study comprised 25 items which measured quality of life in four domains, namely physical health, psychological well-being, social relationships and environmental health. Physical capacity included items on activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, and work capacity (7 items). Psychological well-being measured bodily image and appearance, negative feelings, positive feelings, self-esteem, spirituality/ religion/personal beliefs, and thinking, learning, memory and concentration (6 items). Social relationships included questions on personal relationships, social support and sexual activity (3 items). Environmental health covered issues related to financial resources, freedom, physical safety and security, health and social care: accessibility and quality, opportunities for acquiring new information and skills, participation in and opportunities for recreation/leisure activities, physical environment (pollution/noise/traffic/climate) and transport (7 items). Two additional generic questions on overall quality of life and general health were also included (Appendix 12).

The questions in this questionnaire were categorical in nature and ranked in a Likert-type format from 1–5, producing domain scores. Domain scores were then calculated by multiplying the mean of all the item scores included in each domain. Mean scores were then multiplied by 4 to make domain scores comparable with the scores used in the WHOQOL-100 (Appendix 16).

The WHOQOL-BREF is a well-established measure that has been used worldwide in different populations and has proved to be very popular [132]. Although evidence may be limited to its use in specific populations [135], this instrument has been assessed by multiple authors [131] and the psychometric properties were found to be excellent. According to Portney & Watkins (2009), a scale with strong internal consistency should only show a moderate correlation among items (i.e.: between 0.7-0.9) [123]. Internal consistency reliabilities measured by Cronbach's alpha for this questionnaire in various studies, ranged from 0.7-0.9 [125, 134, 136, 137] where total scale and domains were found to be acceptable and similar to that reported in adult populations in Brazil, Norway, Canada and Turkey [137]. The WHOQOL-BREF was validated in Africa [138] and also used in a South African study involving older persons [19].

WHODAS II questionnaire for members

The World Health Organisation Disability Assessment Schedule (WHODAS-II) is a validated, short, simple and easily administered generic assessment questionnaire used to assess disability, functioning and participation in society [139]. It is based on an international classification system and is applicable across cultures as it treats all disorders at parity when determining the level of functioning [140]. It was specifically developed to measure clinical outcomes and treatment effectiveness over time [140].

In this study, the WHODAS II was used to determine the functional ability of members of service centres by assessing their activity limitations and restrictions in the prior month [141]. It was developed as a 12-item, self-report questionnaire that evaluated 6 adult-life tasks of day-to-day functioning in 6 domains (Appendix 13). The domains are as follows:

- Domain 1: Cognition (includes understanding and communicating)
- Domain 2: Mobility (includes moving and getting around)
- Domain 3: Self-care (includes attending to hygiene, dressing, eating and staying alone)

- Domain 4: Getting along (includes interacting with other people)
- Domain 5: Life activities (includes domestic responsibilities, leisure, work and school)
- Domain 6: Participation (includes joining in community activities, participating in society).

The 12 questions were presented in categories in a Likert-type format with scores assigned to each of the items – ‘none’ (1), ‘mild’ (2), ‘moderate’ (3), ‘severe’ (4) and ‘extreme/cannot do’ (5). A further 3 questions presented were open-ended and required the recording of the number of days (frequency) in which limitations were present in the last month. This generated a general disability score and allowed for the collection of nominal data. The standardised global score ranges from zero (no disability) to 100 (maximum disability) [142].

3.6.4 Procedure

Training of fieldworkers

As described in 3.5.4, four fieldworkers who consented to participate were recruited and trained to assist with data collection. All interview processes and documentation were reviewed and clarified to agree on terminology used.

Pilot study

A pilot study was conducted at two independent service centres for older persons in the Cape Metropole that were not registered with the WCDSO. A similar process to the one described in 3.5.4 was followed. All questionnaires were administered by the face-to face-interview method by the researcher and fieldworkers. The self-developed questionnaire, as well as the WHOQOL-BREF and WHODAS II questionnaires for members were tested on 5 members at each service centre. Thus 10 members participated in the pilot study. The three questionnaires were administered twice to determine inter-rater reliability. Since service centres were only open certain days of the week, permission was granted to the researcher to conduct a second interview that took place within 7 days of the initial interview. Participants were interviewed by a different person. Similar to the process followed in 3.5.4, the WHO (2018) recommendation was considered for the pilot study. Participants were asked about any word they did not understand as well as any word or expression that they found unacceptable or offensive in the questionnaire, and chose which word conformed better to their usual language. Translators considered the definition of the original term and attempted to

translate it in the most relevant way [127]. It was determined during the pilot study that minor changes to the wording in the questionnaires for members were necessary to clarify questions that were unclear.

The following ambiguities in questions within the members' questionnaire were amended as follows: In question 6, the word 'college' was included as an option to select while in question 8, 'multiple responses allowed' was added to the question for clarity. In question 24, an option 9 was created for 'deafness'. In question 25, the word 'native doctor' was replaced with 'traditional healer'.

The average time taken to complete the interview administered WHOQOL-BREF to participants in phase 2 was 15 minutes, and the WHODAS II was 5–10 minutes. These were similar timeframes found in a study by Bodur and Cingil (2009)[143]. The interviews for the pilot study were conducted in English or Afrikaans depending on the language preference of the participants. Interviews conducted in English sometimes required translation of some words into Afrikaans. Due to these translations' requirements, more time was needed to complete the questionnaires. Data collected from this pilot study was not included in the analysis of the main study since the sample did not meet the inclusion criteria.

Recruitment of members

All members of the service centres who met the inclusion criteria were eligible to participate in phase 2 of the study. However, full attendance of the membership at senior centres could not be guaranteed on days of data collection as the elderly face many challenges in their communities, for example, lack of transport, ill health, lack of income and lack of interest in programmes offered [99]. In addition, some service centres had fewer members for other reasons. Since these factors affected the sample representation, the members of senior centres were recruited to the study if they were present at the selected service centre on the day of participant recruitment. Following recruitment of members, inclusion and exclusion criteria were applied to identify the members who would participate in the study.

Data collection

Data was collected over 7 months from December 2014 to June 2015. Data collection proceeded once suitable dates, times and venues for data collection had been negotiated with

the managers of service centres. Data collection for managers and members of service centres were conducted on the same day for each service centre.

A meeting was then held with the members of the service centres in a communal hall where members were requested to select their language of preference. The purpose and logistics of the study were explained. The members' voluntary participation in the study was requested and written informed consent obtained (Appendices 8 and 9). To ensure procedural accuracy, the fieldworkers observed the researcher conduct initial interviews with members. They could ask questions pertaining to the data collection processes, obtaining clarity from answers provided. Once the researcher was satisfied that they understood what was required, the fieldworkers assisted with the data collection.

As suggested by Boen *et al.* [89], face-to-face meetings with older respondents in secure surroundings and meaningful experiences are important in recruiting participants, as well as for gauging participants' understanding of the questions and to provide clarity if required [89, 144]. Once members were assured of the confidentiality of their responses, the interviews with members were conducted by the researcher and fieldworkers in the participants' preferred language in a private, quiet and comfortable area at the centre. The interviews also allowed for participants with visual impairments to take part as recommended by Sviden, Tham and Borell (2004) [107]. The interviews with members took an average of 30 to 45 minutes to complete depending on translation requirements and level of clarification required. Throughout this process the researcher continuously checked procedures and the data collected to ensure a quality assured process.

After the interviews were conducted, the researcher facilitated debriefing sessions with the fieldworkers and addressed unforeseen challenges. The researcher continued to be available to all fieldworkers throughout the data collection period and addressed their queries and concerns as they arose. After completion, the questionnaires were handed in to the researcher for safekeeping.

3.7 Data management

Following the interviews, the researcher collected and collated the questionnaires from managers and members and reviewed them for accuracy and completeness. The

questionnaires were kept in a locked drawer for safekeeping. Each service centre and member were assigned a unique number that was used to code data. Data was then captured by the researcher on a Microsoft Access (2010) database and re-checked against the raw data to avoid data entry error. Thereafter the data was cleaned before it was exported to an Excel spreadsheet for electronic analysis. The electronic data was stored on a password protected external hard drive and will be kept for a minimum of four years.

3.8 Data analyses

3.8.1 Phase 1

Both quantitative and qualitative responses were included in the data. Statistical analysis was done using Statistica version 12. Descriptive statistics were used on closed-ended questions and information was presented in frequency tables. Some closed-ended questions had a qualitative component consisting of open-ended questions. These qualitative responses were summarised and provided additional information on managers. The responses relating to an open-ended question on managers perceived training needs were analysed qualitatively, using an inductive, thematic analysis approach to identify the themes in the responses.

Similar to what was done in a study by Van Malderen *et al.* (2013) [42], the reporting on information pertaining to the types of services provided and managers perceived needs of members were analysed and represented in alignment with the 6 determinants of active ageing as indicated within the WHO (2002) document [13] referred to in Table 2.1. This enabled the researcher to have an ageing framework that described what was expected from the determinants and compare it to what services were available at service centres.

The use of the Active Ageing Policy Framework

Active ageing is conceptualised by the WHO as a process of optimising opportunities for health, participation and security to enhance quality of life as people age [14]. The Active Ageing Policy Framework model is a concept that helps explain the links between activity, health, independence and ageing well. Despite many countries introducing the model recommendations into their national health and social plans of action, there is little evidence to support its application in South Africa. Since government has established service centres to enhance the achievement of the framework, it is important to know what the structure is like

to understand what they need to do. Analysing the data according to this framework thus allowed for the evaluation of service centres in how they support active ageing of older persons (members) who are living in communities.

3.8.2 Phase 2

Both quantitative and qualitative responses were included in the data. Statistical analysis was done using IBM SPSS Statistics version 22 and Statistica version 12. As in Phase 1, descriptive statistics were used on closed-ended questions and information was presented in frequency tables. Some closed-ended questions had a qualitative component consisting of open-ended questions. These qualitative responses were summarised and provided additional holistic information on members. The responses relating to an open-ended question on self-determined future aspirations were analysed qualitatively, using an inductive, thematic analysis approach to identify the themes in the responses. These were reflected in quotations similar to what was done in a study by Datillo *et al.* (2015) [145]. To explore the profile of members of service centres, the frequencies of the data obtained, and the summaries of qualitative responses were represented using the WHO ICF model referring to the four components and categorised domains as referred to in Figure 2.1.

The use of the ICF framework

Similar to what was done in a study conducted by Hakkinen *et al.* (2009) [146], the variables included in the assessment tools (i.e. self- developed questionnaire, WHOQOL-BREF and the WHODAS II questionnaires) used in this study were linked to the most appropriate ICF components to contextualise the findings of the study within the members' broader experience of functioning and disability [147] (i.e. to gain an understanding of their quality of life, as well as limitations that affect their levels of participation).

The ICF is described by the WHO as a framework for organising and documenting information on functioning and disability in a unified standard language [148]. It conceptualises functioning as a dynamic interaction between a person's health condition, environmental and personal factors [147]. Using the ICF when studying the nature of participation in community living older populations may provide guidance for identifying older people living at home who

are at risk for restricting their own participation, and who could benefit from interventions [62] that could most likely be provided at service centres.

According to the ICF framework (Figure 2.1), body functions are defined as physiological functions of the body, such as mental, sensory, voice and speech functions. It also refers to functions of the cardiovascular, respiratory, digestive, reproductive, muscular and skin [55]. Body structures refer to the anatomical parts of the body such as the nervous system, eyes, ears and skin. It also refers to structures related to voice and speech, cardiovascular, respiratory, digestive, and reproductive and movement structures [55].

It is questionable if the ICF concept of activities is actually used [149], and the ICF document also points out that it is difficult to distinguish between activity and participation [56]. However, the document defines activity as the execution of a task or action by an individual while participation is defined as the person's involvement in a life situation. Participation frequency describes the individual's regularity of participating in life tasks [62], while participation restrictions describe perceived restrictions in performing these life tasks, and includes both personal (health, physical or mental energy) and environmental (transportation, accessibility or socioeconomic) factors.

In addition, the ICF also identifies contextual factors as components of a person's health. These contextual factors include environmental and personal factors that represent the complete background of an individual's life and living. Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives [56, 60, 62, 150]. They comprise a wide range of domains from medication and assistive devices to family, friends and social policies [150]. Environmental factors are external to individuals and can have a positive or negative influence on the individual's performance as a member of society, on the individual's capacity or on the individual's structure and function [148]. The classification of environmental factors include the following five categories, namely, products and technology, natural environment and human made changes to environment, support and relationships, attitudes, as well as services, systems and policies [55].

Personal factors are not classified in the ICF because of the large social and cultural variance associated with them [55]. However, personal factors refer to the background of an individual's life and living and comprise features of the individual that are not part of a health

condition or health state. These factors may include gender, race, age, other health conditions, fitness, lifestyle, habits, upbringing, coping styles, social background, education, profession, past and current experience (past life events and concurrent events), overall behaviour pattern and character style, individual psychological assets and other characteristics, all or any of which may play a role in disability at any level [56].

The physiotherapy profession has adopted the ICF as a framework to approach patient care which shifts the conceptual emphasis away from negative connotations such as disability and focus on the positive abilities of the individual [58]. Thus, for this study, the ICF was used as a conceptual framework in Phase 2 to explore the unique characteristics of older persons, considering their interaction with their environments despite their health conditions or disability. The information collected included the members' various aspects of functioning and recognised their need for services and service provision.

Using the ICF 'health condition' component often refers to medical diagnosis [62]. However, as in similar studies by Arnadottir *et al.* [62], the diagnosis was not used in this study. Rather members' self-reported health (including co-morbidities) was listed and included as 'health conditions' and linked to the personal factors component. Likewise, the domain for attitudes listed under environmental factors component refers to those of people external to the person whose situation is being described [148]. In this study, members' self-perceptions and own attitudes are explored. The researcher thus decided it was more appropriate to include the variables describing members' attitudes and aspirations under personal factors since it may impact on their life and living choices.

3.9 Ethical considerations

Ethical approval was obtained from the University of Cape Town, Faculty of Health Sciences Human Research Ethics Committee (663/2014) (Appendix 1). Permission was requested from the national and provincial DSD (Appendices 2 and 4) and support for the study was obtained (Appendices 1 and 3). Permission to participate was obtained from individual service centres.

Ethical principles of autonomy, confidentiality, beneficence, non-maleficence, justice and referral were upheld during all phases of the study.

Autonomy refers to the respect given to study participants to make their own decisions by ensuring that they have been given all the necessary information with which to make the decision. They have the right to have their anonymity protected and privacy maintained. Beneficence / non-maleficence refers to actions performed to the benefit of participants and to prevent and remove any harm that may occur. Justice refers to fairness and equitable distribution of benefits and burdens to participants [123].

The study procedures adhered to the Medical Research Council research ethics guidelines and the Declaration of Helsinki (2) [151]. These are outlined below.

3.9.1 Autonomy and informed consent

Prior to commencement of the study, consent was obtained from each service centre. Each participant received detailed information fully disclosing the nature and purpose of the study including requirements and risks (Appendices 6 and 8). Since informed consent was based on ensuring the participant understood what they were being told and what they were reading [123], this was explained to participants in their first choice of language by the researcher/fieldworker. Participants had the opportunity to have their questions answered. All participants who were willing to take part in the study were informed about the voluntary nature of their participation and gave verbal and written consent (Appendices 7 and 9) prior to completing the questionnaires. Participants were asked to repeat in their own words what had been explained to them to determine if they understood the purpose and logistics of the study, as well as the implications and consequences of their participation. Members unable to give written consent, but who were willing to take part in the study, gave verbal consent in the presence of a witness who attested that the participants understood the consent process. The members' thumbprints were recorded on the consent forms. All participants were informed about their right to withdraw with no negative consequences. Participants were notified that once data had been submitted, it could not be withdrawn as it was anonymous.

3.9.2 Confidentiality

All participants were assured of the confidentiality of their responses. All information was coded, and identifiers removed. These identifiers were only accessible to the researcher via a master list. Collection and storage of the data derived from the questionnaires was stored in

an encrypted external hard drive. The hardcopies of the questionnaires were kept by the researcher for safekeeping in a locked drawer. All fieldworkers signed a confidentiality agreement [152] (Appendix 15).

3.9.3 Beneficence

Beneficence refers to actions performed to the benefit and well-being of the participants [123]. This study provided information on the needs of members of service centres to enrich the services they receive in the future.

There were no direct monetary benefits to participants in this study and this was clearly stated in the consent form. However, as a generous gesture, and in line with social responsibility towards the community served, the researcher provided refreshments to participants on data collection days.

3.9.4 Non-maleficence

The overall risk of the study was minimal as there was no reported health-related or physical risk of injury to participants, hence no insurance was needed. The researcher provided ongoing reassurance of confidentiality and education on the need for the study. This put the older person more at ease, so they did not feel embarrassed, anxious or scared to ask questions, especially if they had low self-esteem or a poor sense of identity, which is often caused by self-stigmatisation. Participants were also made to feel comfortable, welcomed and unthreatened because the study was conducted in an environment they were accustomed to. To avoid participants feeling discriminated against [32] due to the selection of their service centre being random, the researcher explained the selection process to them. Participants suffered no economic loss due to participation as no fees were charged to participate.

3.9.5 Justice

To ensure justice and community engagement, and to avoid discrimination and bias towards participants who were disadvantaged or who had challenges in completing questionnaires due to socio-economic status or impairments, all participants at selected service centres were given the opportunity to participate. Participants who volunteered for the study were interviewed and assisted to complete the questionnaire in their preferred language.

3.9.6 Referral

No participants in the study presented with ill health that required referral for medical assistance.

CHAPTER 4 RESULTS

4.1 Introduction

The results outlined in this chapter are presented separately in two phases in accordance with the specific objectives stated in chapter 1.

Phase 1 is presented within the WHO Active Ageing framework, which aims to inform worldwide policies in relation to describing the needs of older persons and their active ageing [10]. This model conceptualises active ageing as a process of optimising opportunities for health, participation and security of older persons to enhance quality of life as they age. To understand what the service centres are like and the services they provide in their attempt to achieve the goals of the framework, phase 1 reports on the characteristics of the service centres. This includes the organisational structures of the centres, the types of services offered at the centres, the profile of the managers of the centres and the managers' perceptions of the needs of members attending the service centres.

To gain some understanding of older persons who attend the service centres as members, the results of phase 2 are presented using the ICF, which documents information on functioning, disability and health [144]. For this study, functioning is conceptualised as interaction among an individual (in spite of the individual's health condition), environmental factors and personal factors [144].

Figure 4.1 summarises the processes of selection of study participants for phases 1 and 2.

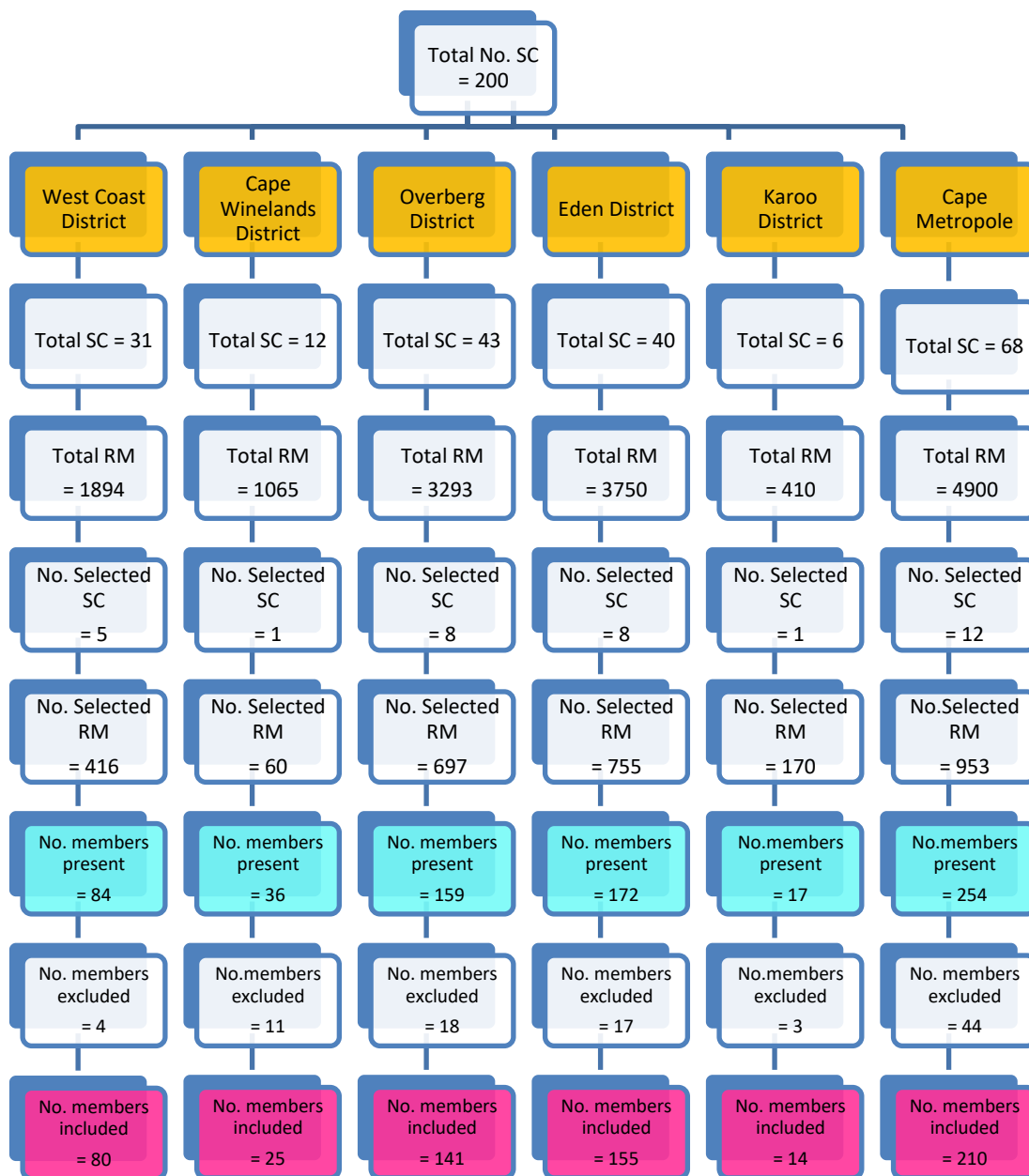


Figure 4.1: Selection of participants

SC = Service Centre

RM = Registered members

4.2 Phase 1

4.2.1 Sample

Of the 200 listed service centres in the five Western Cape districts and the Cape Metropole, 41 service centres for older persons were eligible to take part in the study. Four service centres refused to participate in the study, citing lack of time and resources to co-ordinate data collection visits (n=2), or they felt that the service centre was not suitable for the study requirements (n=1), or they were already accommodating students from one university and could not accommodate students from another (n=1). Two service centres closed down prior to the commencement of the data collection process, thus bringing the final number of excluded centres to six. The results for phase 1 thus refer to the sample of 35 managers from the 35 selected service centres situated in the Cape Metropole, West Coast, Cape Winelands, Overberg, Eden and Karoo. According to the Rural Areas Act, 1987, 34 participating service centres were located in urban areas and one in a rural area [153].

4.2.2 Characteristics of service centres

Organisational structures of service centres

Table 4.1 depicts information pertaining to the organisational structure, affiliation and level of community involvement, support staff, membership and annual budget of the centres.

The 35 service centres explored in this study have been in existence for an average of 19.8 years (range=1–40 years). The DSD records indicated that these centres had 3 051 registered members, ranging from 16 to 230 members per centre. The predominant gender of members at most of the service centres (n=32) was female, while the remainder (n=3) reported mixed membership in terms of gender. The majority of service centres (n=33) reported their members paid fees while two service centres did not charge members a fee to attend.

Table 4.1: Organisational structures of service centres (n=35)

Characteristic		Range
How long the centre has been in existence (years)		Range 1–40 years 19.8 ± 9.2
No. of members per service centre		Range 16–230
Organisational affiliation*	Health care	7 (20%)

Characteristic		Range
	Social Development	24 (68.6%)
	Religious	14 (40%)
	None	4 (11.4%)
	Other	19 (54.3%)
Community Participation	Yes	23 (65.7%)
	No	6 (17.1%)
	Sometimes	6 (17.1%)
Support Staff*	Volunteers	28 (80%)
	Staff paid by centre	19 (54.3%)
	Contract employees	7 (20%)
	Peer leaders	11 (31.4%)
	Professionals	13 (37.1%)
	Students	10 (28.6%)
	Staff from another organisation	9 (25.7%)
	Other	4 (11.4%)
Have an annual budget?	Yes	34 (97.1%)
	No	0 (0%)
	Not Sure	1 (2.9%)
Amount of annual budget[#]	Missing	6 (17.1%)
	<R50 000	5 (14.3%)
	R50 000–149 999	11 (%)
	R150 000–299 999	6 (%)
	R300 000–499 999	2 (%)
	R500 000+	5 (%)
Total annual budget		R2 700–R850 000 R107 670 (Median)
Sources of financial income*	Government	33 (94.3%)
	Members	34 (97.1%)
	Public Donors	15 (42.9%)
	Donor organisations	12 (34.3%)
	Other	23 (65.7%)
Financial Expenditure*	Salaries of staff	24 (68.6%)
	Meeting needs of members	32 (91.4%)
	Maintenance of offices/meeting spaces	23 (65.7%)
	Other	26 (74.3%)

Characteristic	Range
Not applicable	1 (2.9%)

** multiple responses allowed; # monetary value: R1 = USD = British Pound = Euro*

The structure and capacity of service centres are expected to address the needs of their members. Service centres were thus affiliated to multiple organisations (Table 4.1) including Age in Action, Western Cape Forum for Older Persons, Old Age Homes, senior service centres, universities, Woman in Action and Alzheimer's South Africa (n=19). Many of the service centres (n=23) reported that some activities were not restricted to members of the centres only but were open to interested members of the community. Such activities included social activities, educational talks or religious gatherings. Although 80% of service centres obtain support from volunteers, support was also provided by church members, home-based carers and the broader community.

The financial support for service centres came from multiple sources and varied between centres (Table 4.1). Additional sources of income included funding from the South African National Lottery, fundraising events and church contributions. Some service centres also received non-monetary donations that were sold to supplement financial income. There was, however, no clarity in the findings as to the source of income received from members (i.e. whether they were voluntary donations or membership fees).

Thirty-four service centres had annual budgets [154]. The median budget of the 34 centres was R107 670 in 2015 when the data was collected. This amount is equivalent to approximately \$7 520 (US dollars), £6 034 (British pounds), or €7 040 (euros).

Annual budgets were spent on various items that included transport, excursions and extra mural activities, equipment, groceries for meals, vehicle maintenance (including fuel and licensing), running costs (electricity, water), building repairs and maintenance, programme costs (including resources for crafts), staff training, ad hoc remuneration of visiting demonstrators, staff salaries (e.g. accountants, maintenance workers, managers etc.), and administrative costs (including stationery and consumables).

Service provision at service centres

It was assumed that the services provided in the centres would be targeted towards the diverse needs of members of the centres. The services reported by the managers of the centres are presented in Tables 4.2 to 4.5 according to the six determinants of active ageing, namely, health and social service systems, behaviour, personal factors, physical and social environments, and economic determinants.

All service centres provided services in the local languages of the members. However, in addition to the listed factors that influenced the types of services offered, as mentioned in Table 4.2, other factors also influenced the types of services offered. Five managers reported that service provision depended on the amount and availability of capital funding provided by the DSD, as well as the number of donations (financial and non-financial) received from other organisations or the broader community. Services offered were also determined by the availability of resources (e.g. materials) and people to do the work (i.e. staff and/or volunteers). The community's needs also influenced the services provided. For example, if fewer privileged persons were living in the community (i.e. non-members), the service centre would provide food that would be donated or sold to them. Some managers also reported that services provided depended on the type of leadership at the centre but did not elaborate further on this.

Overall, different types of services were provided in the different categories of determinants in the service centres. The most common activities provided at service centres related to the determinant of social support while the least common services related to the behavioural determinant. Included in the types of services listed in Tables 4.2, 4.3 and 4.4 were 'other' additional programmes provided at 24 service centres. Managers reported on these programmes qualitatively. The programmes were then incorporated into the different determinants and represented with # tag as in Tables 4.2, 4.3 and 4.4.

4.2.3 Determinants of health and social service systems

The determinants of health and social service systems entail the provision of integrated, co-ordinated and cost-effective health and social services [13]. In health promotion and disease prevention, a process of enabling people to take control over and to improve their health, over half of the 35 service centres provided blood pressure monitoring (82.9%) and

glucose testing (57.1%) (Table 4.2). At some of the service centres, these services were provided by nurses affiliated to the primary health care centre. The quality of testing/screening of these chronic diseases was not clear. However, when abnormalities were detected during the screening process, the service centre referred members to the appropriate level of health care as part of the curative sub-determinant.

Table 4.2: Services provided at service centres related to health and social service systems (n=35)

Characteristic		Number of service centres (%)
Factors influencing types of programmes offered*	Interest of members	32 (91.4%)
	Needs of members	31 (88.6%)
	Mandated	19 (54.3%)
	Others	5 (14.3%)
Determinants related to health and social service systems	Types of services*	
Health promotion and disease prevention	Blood pressure monitoring	29 (82.9%)
	Glucose testing	20 (57.1%)
	Chronic disease self-management	11 (31.4%)
	Cholesterol screening	7 (20.0%)
	Vision/hearing screening	5 (14.3%)
Curative services	Referrals #	
Long-term care	Home visits#	
	Education programmes for caregivers	7 (20.0%)
Mental health services	Religious activities#	

**multiple responses allowed; # information obtained from qualitative questions*

In terms of long-term care, for those members who were registered with the service centre but who were unable to attend, the service centre offered home visits to extend services to them. These visits, conducted by workers or volunteers at the centre, aimed to provide care in terms of the needs of members. Despite this, only 20% of service centres provided training to these caregivers. The type, content and duration of these training programmes were also not specified.

In relation to mental health, some service centres provided opportunities for members to engage in religious activities such as mentorship and choir training.

4.2.4 Determinants related to behaviours

The determinants relating to behaviours require members to positively change their behaviours and actively engage in various activities that promote healthy lifestyles [13]. To achieve this goal, knowledge was provided to members in the form of educational activities. Education programmes for members were offered in more than 60% of the sampled service centres (Table 4.3). There was, however, no clarity provided as to the content of these programmes.

Table 4.3: Services provided at service centres related to behavioural determinants and personal factors (n=35)

Characteristic		Number of service centres (%)
Behavioural determinants	Types of Services*	
	Education programmes for members	24 (68.6%)
Physical activity / exercise programmes	Dance and/or aerobics	21 (60.0%)
	Walking programmes	19 (54.3%)
	Balance and/or strength	18 (51.4%)
	yoga, Pilates, stretching	14 (40.0%)
	swimming and/or water aerobics	1 (2.9%)
	Sports Activities [#]	
Healthy eating	Meals provision [#]	
Oral health	No services	
Alcohol	No services	
Tobacco use	No services	
Medications	Safety in medication use	17 (48.6%)
Iatrogenesis	No services	
Adherence	No services	
Determinants related to Personal Factors	Types of Services	
Biology and genetics	No services	
Psychological services	Arts and craft design	34 (97.1%)
	Self-care [#]	

**multiple responses allowed; #information obtained from qualitative questions*

Physical activity programmes aimed at reducing the onset of chronic diseases and functional decline [13] were also provided. The results indicated a large proportion of service centres offered different types of physical activity programmes, with dance and/or aerobics being the most common (60%), and swimming and/or water aerobics occurring in only one centre (Table 4.3). Sporting activities to promote social contact and mental well-being were also offered at some service centres, which included training programmes for sporting events and competitions (e.g. Golden Games). The specific details of these programmes were not known.

In relation to the sub determinant of Healthy eating, although members were provided with access to meals at the service centres, the quantity and nutritional value of these meals were unclear. The provision of programmes related to nutrition and healthy eating could therefore not be confirmed. Furthermore, despite the challenge associated with access and over-prescription of medication in older persons [13], less than half of the service centres (approximately 49%) provided programmes related to ensuring safety in medication use. The content of these programmes was also not clarified.

4.2.5 Determinants related to personal factors

The determinants relating to personal factors include psychological factors, which, although varying among individuals, are strong predictors of active ageing and longevity [13]. Psychological factors include, among others, intelligence and cognitive capacity (i.e. the ability to solve problems, including learning speed and memory). A decline in cognitive function is often triggered by factors relating to illness (e.g. depression), behaviour (e.g. use of alcohol and behaviour), psychological (e.g. lack of motivation and confidence) and social aspects (e.g. loneliness and isolation) [13].

A large percentage of service centres (97%) offered services that focused on improving cognitive capacity in the form of arts and craft design (Table 4.3). While members were engaged in these activities, it allowed them to develop their cognitive skills in creating items that were either donated to a charity or sold. In addition, some service centres also provided services related to self-care including hairdressing and podiatry.

4.2.6 Determinants related to physical environments

The determinants relating to the physical environment entail the provision of accessible services, as well as safe physical environments to prevent injury and illness [13]. This allows the older person to live an independent life within their family and community.

More than half of the service centres (74%) provided access to transport, while fewer service centres (26%) addressed the need for safe housing (Table 4.4). In addition, despite falls being the cause of many injuries and subsequent disability among older persons [13], only five centres provided screening services for falls.

Table 4.4: Services provided at service centres related to physical and social environments (n=35)

Characteristic		Number of service centres (%)
Determinants related to physical environments	Types of services	
Physical environments	Transport accessibility	26 (74.3%)
Safe housing	Information on housing	9 (25.7%)
Falls	Fall risk screening	5 (14.3%)
Clean water, clean air and safe foods	No services	
Determinants related to social environments		
Social support	Social support	35 (100%)
	Outreach programmes to find older persons	30 (85.7%)
	Guardianship for members without families	14 (40.0%)
	Recreational programmes [#]	
	Intergenerational programmes [#]	
	Assessments [#]	
	Home visits [#]	
	Meals provision [#]	
	Spiritual guidance [#]	
	Support groups [#]	
Violence and abuse	No services	
Education and literacy	Library services [#]	
	Adult basic education training (ABET) [#]	

**multiple responses allowed; [#]information obtained from qualitative questions*

4.2.7 Determinants related to social environments

The determinants of social environment entail the provision of social support and connections to prevent loneliness and isolation of older persons, as well as to enhance their social interaction [13]. The results indicated that all service centres provided social support programmes (100%). However, the content of these programmes was unclear. Some service centres reported that they provided opportunities for social interaction via recreational programmes where members attended outings and excursions together. Other activities included providing entertainment (e.g. concerts) to members. The details of these activities were not clarified.

Thirty service centres aimed to foster social networks for members through outreach programmes which seek to recruit older persons, so they can come to the centre and possibly benefit from the services provided (Table 4.4). Other programmes also offered included volunteerism and intergenerational programmes (e.g. members read books to younger children at primary schools).

In addition, health and social service professionals provided support to members in the form of assessments, should they have wanted to join a disability group or organisation. Further social support was extended in the form of home visits to registered members who could not come to the centre. These home visits allowed members to be provided with meals, which were either donated to them or they had to pay for it. The nutrition and quality of these meals were unknown. On these home visits, members also engaged in religious activities to improve their well-being. Members were also assisted with shopping; they were either accompanied to the shops or they provided a grocery list and a representative from the service centre did the shopping for them.

Supportive social connections and intimate relations are vital sources of emotional strength [13]. Some service centres provided support groups where members got together and were able to interact and share their experiences. However, the detail of these services is unknown. Under the sub-determinant of education and literacy, library services and adult basic education training (ABET) were the two main activities provided in the service centres to members. The details pertaining to these services are not clear, although these services allowed members to remain engaged in meaningful and productive activities.

4.2.8 Economic determinants

The economic determinants acknowledge the need to recognise the active and productive contribution older people make to the economy [13]. This contribution could be in the form of work and voluntary activities, both of which have the potential for generating income for them or for the service centre. A large percentage of service centres (97%) acknowledged the skills of members by providing arts and craft design programmes (Table 4.5). The primary goal of the service centres was to sell the items produced at fundraising events to generate income. It was not clear from the results whether income earned from these fundraising initiatives was used to provide further services to members, or whether members received a portion thereof for personal use.

Table 4.5: Services provided at service centres related to economic determinants (n=35)

Characteristic		Number of service centres (%)
Economic determinants		
Income	Arts and crafts design	34 (97.1%)
	Fundraising activities [#]	
Social protection	No services	
Work	Employment of members [#]	
	Volunteerism [#]	
Other programmes		24 (68.6%)

*multiple responses allowed; [#]information obtained from qualitative questions

In addition to fundraising initiatives, some service centres provided opportunities for members to engage in formal work to generate an income. At some service centres, where the members were also managers, employment was provided which attracted a monthly salary. It is not clear how many of these managers were also members of the centres. Service centres also employed people as chefs who worked in the kitchen and who prepared and provided meals for members. It was unclear how many of these chefs were members of the centre. Many service centres also provided programmes that involved voluntary work, offered by the members and the broader community. It is; however, not clear what specific programmes were provided by the volunteer members, and which were provided by the broader community.

4.2.9 Profile of managers of service centres

Characteristics of managers of service centres

Table 4.6 highlights information pertaining to the profile of managers in terms of age, gender, marital status and highest qualification. It also depicts information on the managers' involvement and experience in managing a service centre, as well as status and capacity of employment, and type of remuneration received. Aspects relating to the managers' perceived training needs are also highlighted.

Table 4.6: Characteristics of managers of service centres (n=35)

Characteristic		Number of managers (%)
Age groups (years)	40–49	7 (20%)
	50–59	5 (14.3%)
	60–69	15 (42.9%)
	70+	8 (22.9%)
Gender	Female	30 (85.7%)
	Male	5 (14.3%)
Marital status	Single	1 (2.9%)
	Married	18 (51.4%)
	Divorced	6 (17.1%)
	Widowed	10 (28.6%)
Highest qualification	Primary school	6 (17.1%)
	High school	14 (40%)
	College (diploma)	12 (34.3%)
	University graduate	3 (8.6%)
Length of time involved in SC (n=34)		12.03 ± 8.1 years Range 0.3–29 years
Length of time responsible for service delivery at SC (n=34)		9.83 ± 7.0 years Range 0.3–26 years
Previous experience in managing a SC or similar facility	Yes	11 (31.4%)
	No	23 (65.7%)
	Not sure	1 (2.9%)
Status of employment	Full time	28 (80%)
	Part time	4 (11.4%)
	Unknown	1 (2.9%)
	Other	2 (5.7%)
Type of employment	Permanent	25 (71.4%)
	Temporary	2 (5.7%)
	Contract	4 (11.4%)

Characteristic		Number of managers (%)
	Unknown	1 (2.9%)
	Other	3 (8.6%)
Type of remuneration	Paid salary	25 (71.4%)
	Volunteer	10 (28.6%)
Was training received to manage the centre?	Yes	27 (77.1%)
	No	7 (7.0%)
	Not sure	1 (2.9%)
Do managers think a training programme is needed?	Yes	32 (91.4%)
	No	2 (5.7%)
	Not sure	1 (2.9%)

SC = service centre

The service centres were predominantly run by female managers (86%) with an overall mean age of 63 years (SD=11.41 years; Range 43 to 89 years). The educational qualifications of managers varied, with less than 50% of managers having received a tertiary education (Table 4.6).

Some managers had been involved with and responsible for service delivery at service centres for many years. Eleven of the 35 managers indicated, however, that they had previously been involved in managing a service centre or a facility like that of a service centre. The majority (80%) of the managers were employed by the service centres on a permanent full-time basis and received a paid salary. In addition, most (91%) of the managers felt training programmes were needed to develop their skills and knowledge. More than 70% of the managers reported they received training to manage the service centres. These managers were requested to describe the training they received.

Training of managers

The training of the managers is presented according to (a) training providers, (b) duration of training, (c) type of training received, and (d) the content of training received.

(a) Training providers

The training of managers was provided by non-governmental organisations, academic institutions, government departments and personnel at service centres (e.g. management and social workers).

(b) Duration

The length and frequency of training received varied among respondents and ranged from a minimum of 4 hours to 5 days, with a frequency of 1 to 4 times per year. Some managers also reported training to be ongoing, while others reported it to be occasional and/or ad hoc as determined by management through the course of the year. One manager received 3 months full-time training, while two managers received between 2 weeks and 3 months training.

(c) Type of training

The managers reported training to be both formal and informal. However, one manager commented that, 'it's more guidance than actual formal training'. Sometimes training was 'on the job' as reported by one manager as they were trained while also rendering services. Another identified 'shadowing training' where they could learn skills from watching others. One manager reported that training was also done in the form of workshops.

(d) Content of training received

The content of training varied among managers. The information obtained from managers was summarised according to the themes below to identify the key content of training programmes offered to them:

(i) Centre administration and management

Managers were taught management and organisational skills on 'how to run/manage the centre'. This included learning the responsibilities of the organisational structure, how to set goals and manage service programmes. Knowledge on administration processes and report writing was also included.

It was identified that the development of leadership skills was important in managing a centre. Training therefore addressed aspects relating to staff management / support and supervision, as well as labour relations and capacity building. Some managers reported enhancing their cooking and catering skills via the attendance of training programmes to support the management of the kitchen at the centre.

(ii) Financial planning and management

Managers reported they were taught 'how to work with money' and 'to know how to spend it correctly and save'. Other aspects relating to financial management training included

aspects on budgeting, accounting and financial resources. One manager also reportedly received training in 'business planning, costing and marketing'.

(iii) Project management

Results indicate that managers were taught how to plan and organise events, projects and programmes, including how to do fundraising, and how to develop and sustain a project.

(iv) Interpersonal skills

Managers were trained on aspects relating to human relationships and how to manage people and conflict situations. Communication skills were taught to assist managers when listening to peoples' problems, so they could give advice and counsel.

(v) Continued education on care of the older person

Managers were trained on how to work with elderly people and how to manage the challenges of ageing. Some reported they were taught about empowerment programmes with the aim to 'improve knowledge on health conditions', 'develop person-centred care for people suffering from Alzheimer's disease' and 'empower elders to care for their family in times of sickness (e.g. HIV/Aids)'. To ensure the well-being of older persons, managers were informed about 'exercise prescription, diet and nutritional needs of the elderly' via these training programmes. Information on home-based care was also offered.

(vi) Rights of older persons

Some managers received training on legislation and policies related to older persons specifically pertaining to the Older Persons Act, 13 of 2006. They also received training regarding abuse of older persons, women and children.

(vii) Emergency care

Some managers reported receiving first aid training in the event of an emergency.

Managers perceived training needs

Many managers (77%) received training and 91% thought a training programme was needed to help them to manage the service centres. This training programme referred to by managers included continuing educational programmes, as well as formal training required to qualify as

a manager. The results of their perceived training needs were summarised according to themes and are presented below:

(a) Centre management

Managers wanted training to assist with activities pertaining to the administration and management of the centre, including the allocation and support of staff. There was a need for training in this area, so managers could know:

‘how many people will be needed to give services at the centre’

‘how to place staff in their correct jobs’

‘the condition and employment of staff’.

Administrative skills training was needed to know ‘how to manage activities at the centre doing timetables, rosters, and keeping the books organised’, as well as ‘how to run the centre and record activities’.

(b) Financial management skills

The results indicated managers wanted training in financial management in an array of areas. These included skills on budgeting, fundraising and banking. Some of the manager’s comments are reported below:

‘How to use the money correctly to provide services’,

‘How to work out wages and where staff must work and times of work then also to work with money allocated to the centre’,

‘Information on what exactly a budget is so as to manage services properly’.

(c) Computer literacy skills

There was a significant need for training in computer skills to improve communication and assist with administration of activities at the centre. Many managers said they needed ‘computer skills on how to use the computer like send emails and type reports’ and ‘to know how to use the computer to make me better at my job’.

(d) Fundraising skills

The results indicate that service centres need to raise funds to support sustainability of services. Managers felt they had to be innovative and creative with service development. To do this, they needed skills training on how to do basic project management and fundraising activities to be self-sufficient to sustain their own services.

(e) Networking and collaboration with communities

Managers were clear in expressing the need to develop good public relations and network with their communities. They felt that networking helped with recruitment of new members. They thus wanted to be shown how to link with other organisations and the community should support be required, including fundraising. Managers said, 'we want to see how we can help each other'. Furthermore, managers wanted to meet people and form relationships to benefit the centre. Managers said 'teach me skills to assist with how to contact people who can help the centre and find new members and fundraising activities. In addition, managers expressed the need to have a basic understanding of how to contact and deal with health organisations and others like the South African Social Security Agency (SASSA), a national agency of the South African government that administers the application, approval and payments of social grants.

(f) Interpersonal skills

Managers reported that the training programme should include the teaching of appropriate interpersonal, communication and counselling skills to assist with conflict management. The results indicate that managers want to know:

'How to deal with disagreements between people and help them solve problems, give advice, and how to talk to one another'

Furthermore, managers felt that training in communication skills would also help them on how to manage staff, work with groups and learn how to interact with seniors. They further reported that being taught communication skills would be useful, 'especially those elders who can't speak due to stroke'.

(g) Education on how to train carers and volunteers

Managers felt they wanted training to strengthen their knowledge base, so they could teach carers and volunteers what to do to help them take care of the elderly, especially those that live at home and who cannot come to the centre. One manager stated, 'Skills are needed to train committee members and self'.

(h) Continued education on how to care for the older person

The results indicate that managers expressed the need for information on the ageing process and the challenges of old age to 'develop an understanding on the needs of aged people' and 'how disease or sickness affects them'. Managers reported:

'I need skills training on what can happen when people become older and the ageing process. Also, to prepare people when they get older.'

'I need to understand the challenge of old age and teach people to understand different cultures and religions.'

(i) Rights of older persons

Managers requested training on how to 'support and empower elders in caring for themselves'. They felt that it was important to have knowledge on the abuse of older persons, so they could develop skills to advocate for the rights of elders and prevent abuse.

(j) Health care of older persons

Managers reported they needed to be more knowledgeable about the 'medical health for seniors' and on 'how to manage health problems experienced by the elderly'. It was reported that more education programmes were required to 'identify the health care needs of members', as well as improve managers' ability to impart knowledge on the management of chronic diseases such as diabetes and hypertension. One manager wanted to 'know more about the diet, food choices and other factors that influence health' to prevent disease and promote the health of members.

(k) Emergency care and safety of the older person

Managers reported a need to know how to manage emergency situations both at the service centre and at homes should the need arise. They reported a need to know:

'What to do in an emergency when an elder gets sick at the centre'

There was an expressed need to have knowledge on first aid, life support and how to manage other types of emergencies. Managers felt that other aspects of safety training should focus on 'what to do if there is a fire and how to prevent it' and 'safety management around the home and at the centres (e.g. fire prevention)'.

(l) Development of service measuring instruments

The results indicated that managers wanted to know how to develop monitoring and evaluation instruments that measure the service needs of members, as well monitor the quality of services.

(m) Other training needs

Managers felt training programmes were inadequate and needed to contain content that would help them meet the ongoing and relevant needs of members. This needed to include skills training that encompassed handiwork, creative arts, ABET and social work intervention. In addition, managers also wanted to know how to be innovative and creative to develop services and activities with older persons. Some managers also wanted lessons on how to drive a vehicle.

4.2.10 Managers' perceptions of the needs of members of the centre

Managers acknowledged that programmes offered at service centres were based on the interests and needs of their members. However, managers of service centres (n=35) appeared to have their own perceptions as to what these needs were.

The themes and subthemes in managers' responses are presented according to the six determinants of the WHO Active Ageing Policy Framework (Table 2.1).

Manager's perceptions of the needs of members related to health and social service systems

(a) Health promotion and disease prevention

Managers felt that, to prevent NCDs and injuries, members needed to take control over their own health through empowerment, education and screening for chronic diseases. They reported that:

'They should be assisted with chronic disease management e.g. hypertension and diabetes'

'There should be education talks to the elderly on how to manage chronic diseases themselves'

'Health workers affiliated to the service centre should monitor members'

'The physical needs (health support) should include check-ups of members by the Department of Health'

'There should be empowerment training on awareness of the challenges of old age'.

Managers also perceived members to have needs related to general health. They mentioned members required:

'wellness advice' and 'basic health care'

'caring for clients' hygiene and physical needs'

(b) Curative services

The results indicated a need for partnerships with government, health professionals and organisations representing older persons to monitor and manage their health. Managers also commented that health services needed to be equitable and accessible to members. This included access to their medication to manage chronic diseases. Services must also be supported by professionals. They stated:

'Members should get medication from the club via home-based carers on a monthly basis with health observations'

'Health care needs like chronic diseases and co-morbidities. They must bring medication to members at the centre'

'Members need occupational therapy and other health professionals'

'There should be networking and collaboration with clinics/hospitals to take out clinic cards for the elderly so that waiting time is reduced'.

(c) Long-term care

Long-term care ensures that persons who are not fully capable of self-care can maintain high quality of life [13]. Managers felt that these kinds of services were needed by families and

communities to care indirectly for and support the needs of members. Managers commented and said:

‘Respite care is needed for elderly for relief of family’

‘They should be able to support families when affected by crime and incidents, HIV and Aids’

‘They should do home visits and render services to members who cannot physically attend’

(d) Mental health services

Culture and spiritual needs shape the way in which ageing takes place and influence all determinants of ageing [13]. Managers felt that religion and the impact of culture played a huge role in the lives of members. They noted that service centres attempted to meet the needs of members through religious teachings and cultural awareness. Managers said:

‘They have cultural needs – a need to create an awareness among one another’

‘Members need spiritual development and religious teachings’

‘They need to be encouraged by racial and cultural diversity’

Managers’ perceptions of the needs of members related to behavioural determinants of health

The adoption of healthy lifestyles and actively participating in self-care is important throughout life [13]. However, managers did not perceive there to be a need to address the behaviours that affect these healthy lifestyles. Managers did not perceive members to need services related to tobacco use, oral health, alcohol use, medication usage, iatrogenesis and adherence. It was not clear if this was because members were already fully aware of these aspects of their health or if managers did not think services were necessary.

Managers identified the following aspects related to behavioural determinants of health.

(a) Physical activity

Participation in physical activity can delay functional decline and reduce the onset of chronic diseases [13]. Managers thus felt members needed to maintain good health through physical

exercise and sport activities. The need to include music with physical activity sessions was also highlighted. They suggested:

‘Provide physical exercise to encourage healthy lifestyles’

‘Members need exercises to keep themselves active’

‘Members need physical exercises with music and sport activities e.g. Golden Games’

‘Members need to do arts and crafts activities, singing, dancing and cultural activities’.

(b) Healthy eating

Poor nutrition can be caused by, among other reasons, limited access to food and lack of information and knowledge about nutrition [13]. The provision of healthy meals was thus identified as a basic need of members that required intervention. This was indicated in the manager’s feedback:

‘Provision of balanced meal daily’

‘Nutrition (meals on wheels)’,

‘Members need education programmes that teach them about healthy eating and balanced diets’.

Managers’ perceptions of the needs of members related to personal factors

Managers did not perceive members needed to be aware of the role of biology and genetics in their health. However, the sub determinant of psychological factors was addressed.

(a) Psychological factors

Psychological factors include the ability to solve problems and adapting to change and loss, greatly influencing the ageing process [13]. The results indicate that managers identified the need for stimulation activities to improve members’ cognitive function and to encourage integration. Some managers reported that these activities would keep members busy and prevent them from getting bored. In addition, members also needed training to do arts and crafts to share these skills. Manager’s reported:

‘They should share skills and knowledge in sewing and arts and crafts’

‘They need to do activities to avoid boredom’

'Members need to do arts and crafts activities, singing, dancing and cultural activities'

'Activities are needed to keep elders busy'

'They need games to stimulate them'.

The results also indicated members needed to groom themselves as this would develop their self-esteem. Managers said:

'Caring for grooming to build self-esteem – washing and cutting hair'

'Services on foot and hair care',

Manager' perceptions of the needs of members related to the physical environment

Managers identified determinants to active ageing relating to the social environment. These included:

(a) Physical environments

Hazards in the physical environment can lead to debilitating injuries and subsequent disability [13]. Managers were nearly unanimous when indicating that members of service centres needed assistance with their own safety and safety around the home to care for themselves. They said members needed:

'Education sessions from police, fire brigade (e.g. first aid/safety)

'To be provided with accessibility to ambulance services and first aid'

'Safety regarding equipment and appliance usage'.

To access services, managers commented that members needed information on transport options available to them and how to access it. They also needed transport as a form of support to attend programmes and participate in the community. In addition, access to means of communication and community organisations was needed. Managers reported:

'Members need transport to and from the centre'

'Provide transport to clinics, hospitals, shopping'

'Transport to and from home'

'Information on transport is needed'

‘Provide access to telephones and community organisations, health services and home visits’.

(b) Safe housing

Managers did not perceive that members needed to be aware of aspects relating to safe and adequate housing.

(c) Falls

Managers did not report that members needed information on falls prevention despite falls most often occurring in the home environment.

(d) Clean water, clean air and safe foods

Managers did not identify that members needed access to clean water, clean air and safe foods. It was not known if this was because provision had already been made for members.

Managers’ perceptions of the needs of members on the determinants related to the social environment

Health and wellbeing is affected by the presence of intimate relationships and social support [13].

(a) Social support

Many managers identified the value of social interaction and integration among membership to combat/prevent loneliness and illness. Managers felt that members’ presence at the service centre provided them with relief from their daily routine and strengthened their relationships with others. Managers commented:

‘Members need a place to meet and enjoy social integration and develop personal relationships-give them a break from responsibilities at home’

‘They need to go on social outings and do activities’

‘Social integration is necessary to avoid illness’

‘Members need social integration and form personal relationships to prevent loneliness and encourage racial and cultural diversity’

Managers also indicated that members needed support with access to food:

‘Provision of food parcels’

‘Provide meals’.

Managers also indicated that members needed to participate in recreational and leisure activities, for example,

‘Social outings’ and ‘excursions and outings’

‘Social interaction and integration at the centres such as tours and excursions to holiday destinations’.

(b) Violence and abuse

The abuse of older persons is common and includes physical, sexual, psychological and financial abuse [13]. Managers reported that it was important for members to become aware of how to identify this problem. The results indicated the following was needed by members:

‘Education talks on older persons rights’

‘Victim empowerment (training on the Act)’.

(c) Education and literacy

Education and literacy of members impacts on their risks for disability and functioning [13]. Managers therefore felt continuous training was needed to facilitate members’ knowledge and skills. They suggested:

‘Members need to read and write’

‘Attend ABET classes’

‘Skills development’.

Managers’ perceptions of the needs of members related to economic determinants

(a) Income

Members’ income has a significant impact on their health care, housing and access to nutritious foods. This in turn affects their functioning within communities [13]. Managers felt that members needed financial aid and to be taught skills on how to manage their finances. They reported:

‘Maintain a good understanding about the responsibility of looking after themselves (e.g. money management)’

‘Financial aid’

‘Learning opportunities for income generation’.

Managers felt members were still able to contribute to income-generating opportunities at the centre and required skills development in this regard. They mentioned members need to:

‘be involved in the re-use of articles to generate income for themselves’

‘do arts and crafts activities to sell for fundraising’.

(b) Social protection

A pension is a means of social protection for older people who are unable to earn a living [13]. Managers felt that members needed to care for their pensions as a form of income. They stated:

‘Safety by caring for themselves and their pensions’.

(c) Work

Older persons can still actively contribute in the work sector whether it is formal, informal, unpaid, or in a voluntary capacity [13]. Although managers felt members were still able to contribute to income generating opportunities, they did not identify members needing to be formally employed.

4.3 Phase 2

In phase 2, the socio-demographic, health and psychosocial profile of members were presented using the two components (contextual factors and functioning and disability), and subsections (personal factors, environmental factors, body functions, activity and participation) of the ICF Framework. This was done to contextualise the findings of this section of the study within members’ broader experience of functioning and disability [13].

4.3.1 Sample

Based on records available, there were 3 051 registered members at the 35 service centres who were eligible to participate in the study (DSD, 2013/2014). Of the 3 051 registered

members, 722 were present at the service centres on the different days when the interviews were conducted. From these eligible 722 members, 96 members were excluded as they did not meet the inclusion criteria, and one was excluded after data collection based on an incomplete questionnaire.

The results for phase 2 of the study thus refer to the sample of 625 members from the 35 selected senior service centres situated in the Cape Metropole, West Coast, Cape Winelands, Overberg, Eden and Karoo.

4.3.2 Profile of members of service centres

The profiles of the members of the centres are presented, linked to the components and subsections of the ICF model in Figure 4.2.

Personal factors

Personal factors represent influences in the background of an individual's life and living that impact on their functioning. It may also play a role in their level of disability [56, 60, 147]. Personal factors may include gender, race, age, other health conditions, fitness, lifestyle, habits, upbringing, coping styles, social background, education, profession, past and current experience, overall behaviour pattern and character, and individual psychological assets [148]. The characteristics of the participating members, relating to the personal factors listed in Figure 4.2, are presented below.

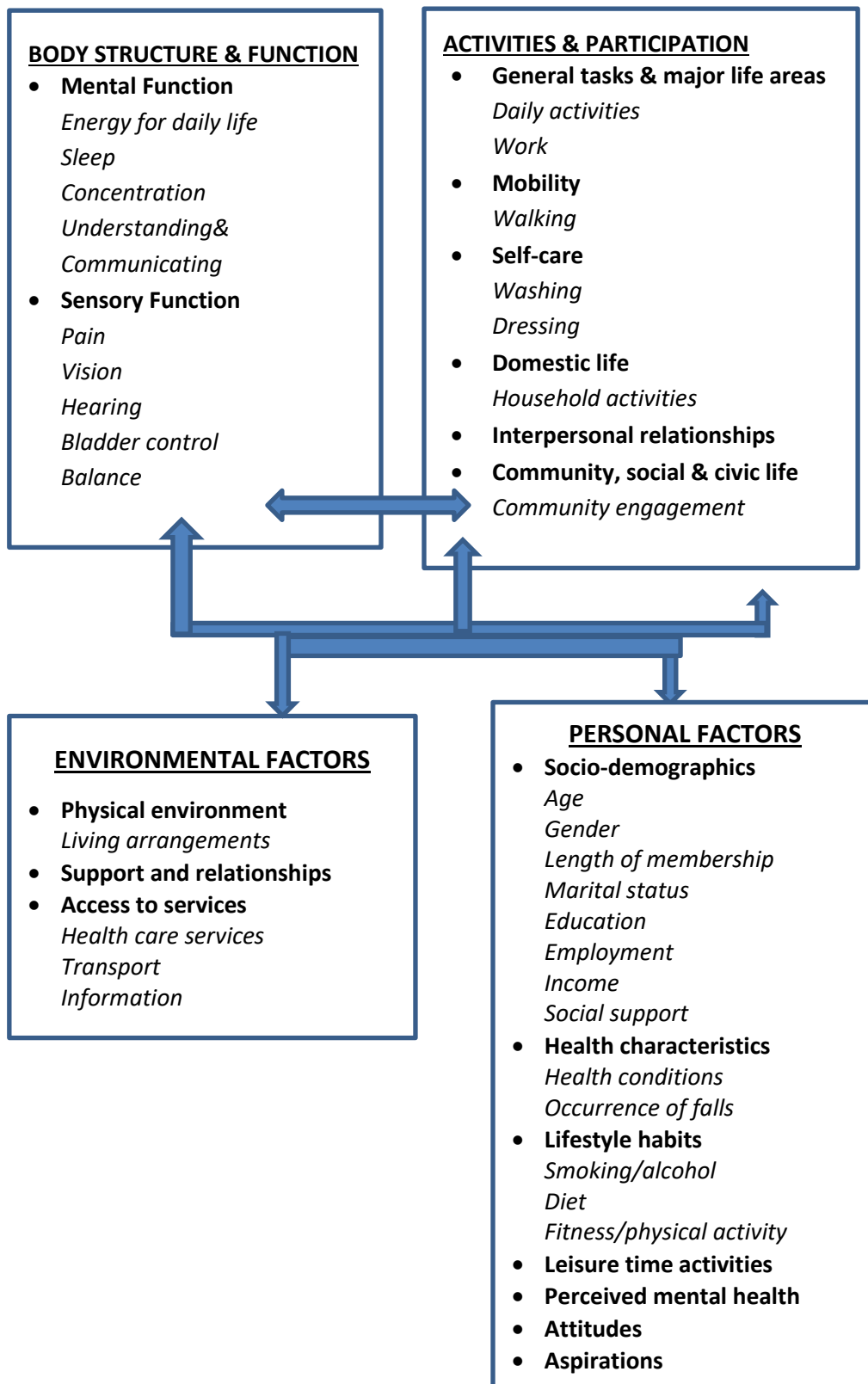


Figure 4.2: Profile of members of service centres using the ICF model

(a) Demographic characteristics

The sample of participating members was characterised by a female majority (85.1%), with a mean age of 74 years (SD=7.44), ranging between 60–100 years old (Table 4.7). Most of the participants (48.6%) were in the 70–79-year age group.

Table 4.7: Age and gender distribution of members of service centres who participated in study (n=625)

Age Category (years)	Males N (%)	Females N (%)	Total N (%)
60–69	32 (34.4)	146 (27.4)	178 (28.4)
70–79	44 (47.3)	260 (48.8)	304 (48.6)
80–89	13 (13.9)	109 (20.4)	122 (19.5)
90+	4 (4.3)	17 (3.1)	21 (3.3)
Total	93 (14.8)	532 (85.1)	625 (100)
Age (SD) years	(73.5 ± 7.91)	(74.1 ± 7.44)	(74.1 ± 7.51)
	Range 60–100 years	Range 60–95 years	Range 60–100 years

According to Table 4.8, the study participants have an average length of membership of 7.5 years (SD=6.43) in the service centres, ranging from approximately 5 days to 38 years. Most of the participants were widowed (57.8%), had only primary school education (48.5%), and were not engaged in any formal employment (97.3%). However, 15 members reported that they were employed and remunerated for their work. They were employed either as farmers or labourers, domestic workers or housekeeping supervisors, gardeners, fishermen, truck or commercial drivers, or pastors. Three reported they were employed as co-ordinators or administrators at the service centres or were remunerated for making meals for its members. In addition to income received through employment, nearly all members were in receipt of an old age grant/pension (99%). This income was to a lesser degree augmented by other resources they received from their spouses, children and family to assist them in caring for themselves. However, it was not clear whether these additional resources were monetary or non-monetary.

Members also reported receiving additional support originating from other sources. This included financial support from their own retirement annuities and pension funds that belonged to their deceased spouses or their parents, members' own savings, money obtained

through divorce settlements and unemployment insurance funds. Members also obtained donations from churches or social support groups and were also involved in the sale of arts and crafts, the proceeds of which were used to support themselves. Some members rented out their homes or properties to tenants and benefited from income received from the agreements. Lastly, some members obtained financial support from child support grants, foster care grants and disability grants of persons they provided care for. The specific rand value of these different forms of income was not clarified. Most of the participating members (33.4%) reported they had enough money to meet their needs and perceived that they were receiving adequate social support (71.4%), although the type of support was not clear.

Table 4.8: Profile of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Length of membership at SC (years)		7.55 ± 6.43 years Range 0.01–38 years
Marital status	Never married	80 (12.8%)
	Married	145 (23.2%)
	Separated	6 (1%)
	Divorced	33 (5.3%)
	Widowed	361 (57.8%)
Highest qualification	None	63 (10.2%)
	Primary	303 (48.5%)
	Secondary	219 (35%)
	College/Tertiary	35 (5.6%)
		(Missing = 5)
Employment	Yes	15 (2.4%)
	No	608 (97.3%)
	Sometimes	1 (0.2%)
	Description of employment [#]	(Missing = 1)
Source of income (Resources to care for self) *	Old age grant/Pension	619 (99%)
	Spouse	35 (5.6%)
	Children	62 (9.9%)
	Family	15 (2.4%)
	Other [#]	39 (6.2%)
Enough money to meet needs	Not at all	153 (24.5%)
	A little	73 (11.7%)
	Moderately	168 (26.9%)

Characteristic		Number of members (%)
	Mostly	209 (33.4%)
	Completely	22 (3.5%)
Adequate social support	Yes	446 (71.4%)
	No	30 (4.8%)
	Sometimes	131 (21%)
	Not sure	11 (1.8%)
	No response	1 (0.2%)
		(Missing = 6)

SC = Service Centre; *multiple responses allowed; #information obtained from qualitative questions

(b) Health characteristics

According to Anadottir *et al.* (2011), perceptions of health are not included in the ICF [60]. However, multiple variables within various ICF components represent the body and the person in context and may play an important role in older persons' self-ratings of health. The perceived health needs of the participating members are presented in Table 4.9.

Table 4.9: Health related characteristics of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Self-reported health problems*	None	66 (10.6%)
	Hypertension	436 (69.8%)
	Arthritis	242 (38.7%)
	Diabetes	194 (31.0%)
	Visually impaired	101 (16.2%)
	Heart Disease	98 (15.7%)
	Deafness	55 (8.8%)
	Asthma	54 (8.6%)
	Dizziness/Fainting	39 (6.2%)
	Stroke	33 (5.3%)
	Osteoporosis	20 (3.2%)
	Falls	12 (1.9%)
	Blindness	2 (0.3%)
	Lower Leg amputation	1 (0.2%)
	Other [#]	76 (12.2%)
Who diagnosed health problem*	Health care professional	551 (88%)
	Self	15 (2.4%)

Characteristic		Number of members (%)
	Other [#]	4 (0.6%)
	Not applicable	66 (10.6%)
Medication usage		
Use of medication for health problem	Yes	537 (85.9%)
	No	85 (13.6%)
	Not sure	1 (0.2%)
		(Missing = 2)
Take over counter medication	Yes	237 (37.9%)
	No	383 (61.3%)
	Not sure	3 (0.5%)
		(Missing = 2)
Do you know the reasons why you are taking medication?	Not on medication	85 (13.6%)
	Yes, I know	533 (85.3%)
	No, I don't know	1 (0.2%)
	Not sure	3 (0.5%)
		(Missing = 1)
Who prescribed the medication? [#]		

* multiple responses allowed; [#] information obtained from qualitative questions

Although almost 11% of members reported having no health problems at all, a large proportion of participants reported one or more health problems. Most of the time, these health problems were diagnosed by health care professionals such as nurses, doctors, psychologists and allied health professionals (88%). Less than one percent of members reported that their medical problems were occasionally diagnosed by themselves, their spouses and children, or by the opinions of other people.

The most frequently reported health problems included hypertension (69.8%), arthritis (38.7%) and diabetes (31.0%). In addition to the health problems listed in Table 4.9, 12 percent of the study participants reported other medical conditions affecting various systems within the body. These included cancer, cholesterol, gastrointestinal problems, kidney and liver disease, gout, lower back problems, epilepsy, lung disease and thyroid problems. Members also reported depression, Parkinson's disease, joint replacement surgery (e.g. knee, hip, spine), and impairments of their vocal cords and sinuses.

To manage the reported health problems, 85.9% of members used medication which was mostly prescribed by doctors at community health centres and hospitals. On occasion, a few (37.9%) members self-medicated and bought over-the-counter medication at the local pharmacy or store. Most members (85.3%) reported they knew why they needed to take medication. There was however no clarity on whether members remembered to take their medication.

(c) Occurrence of falls

The occurrence of falls among participating members of the service centres is presented in Table 4.10. About 30% of members, when asked directly, had experienced a fall within the past year. However, despite most members (69.8%) reporting they had not fallen within the past year, most members (73.8%) still had a fear for falling.

Table 4.10: Occurrence of falls among members of service centres who participated in study (n=625)

Characteristic		Number of Members (%)
History of falls (past year)	Yes	186 (29.8%)
	No	436 (69.8%)
	Not sure	2 (0.3%)
		(Missing = 1)
Fear of falls	Reasons for falls [#]	
	Yes	461 (73.8%)
	No	149 (23.8%)
	Not sure	12 (1.9%)
		(Missing = 3)

[#] information obtained from qualitative questions

Those members who had fallen were able to provide reasons for their fall. These included: (i) tripping over objects; (ii) slipping on surfaces; (iii) fainting; (iv) loss of balance due to weakness; (v) lack of adequate support, and (vi) unforeseen circumstances.

(i) Tripping over objects

Members reported tripping over objects like furniture, bricks, mats, pavements, grass, roads and drains. This happened when their foot hooked on an object due to improper shoes, poor lighting, poor visibility of the object and poor vision. Members reported:

'My foot hooked on the uneven paving in the yard causing me to fall'

'I did not see the brick and fell over it'

'I fell over a stone in the yard because I was wearing slippers'

(ii) Slipping on surfaces

Some members reported slipping on various types of surfaces due to improper shoes and/or surfaces being wet and slippery.

'I slipped on a wet floor'

'I was carrying two bags and slipped on an orange peel in the road'.

(iii) Fainting

Some members reported dizziness and fainting as a reason for their falls. They said this was either due to their hypertension or when they forgot to take their medication. Members said:

'I was in the heat at the beach all day, got dizzy, then I fell'

'I felt dizzy due to my high blood pressure, so I fell'

'When I forget to take my medication, I get dizzy and sometimes fall'.

(iv) Loss of balance due to weakness

Some members lost their balance and fell due to weak and painful legs, and/or poor knee stability. This reported weakness was often because of previous strokes, heart disease and symptoms of Parkinson's disease. Members reported:

'I have arthritis, so my legs are weak and it just "gave in" and I fell'

'My heart disease has made me weak and frail, making me fall often'

'My leg just got lame and I lost my balance'

'Due to my stroke and lower limb weakness I often fall'.

(v) Lack of adequate support

Improper support while walking down the stairs (e.g. no rails) and inadequate physical support from carers were reportedly some of the causes of falls in members. Members said:

'I didn't have support when walking down the stairs'

'My sister didn't hold me when I got out of bed'.

(vi) Unforeseen circumstances

On a few occasions, the reasons for falls were related to unforeseen circumstances such as road accidents, being pushed by someone or being chased by an animal. Some members also said they fell off the chair, either because they missed the position of the chair or the chair broke. They also reported falling off the bed due to experiencing nightmares. Members mentioned:

'I was a pedestrian in a motor vehicle accident when the taxi knocked me over'

'I was riding a bicycle and didn't look where I was going and fell off'

'I was helping my daughter into the bus when I felt someone pushing me and I fell'

'I was chased by a dog then I fell'

'I fell off the chair, I did not know the chair was broken'

'I fell because I thought the chair was behind me'

'I fell off the bed because I had a nightmare'.

(d) Lifestyle habits

The lifestyle habits of participating members are presented in Table 4.11. The adoption of healthy lifestyles and engaging in appropriate physical activity, healthy eating and not smoking or using alcohol can prevent disease and functional decline in older persons [13]. Members were involved in various behaviours that may impact their health positively or negatively, directly or indirectly, with positive or negative consequences.

Table 4.11: Habits, Diet and Physical Activity of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Habits		
Use of tobacco	No, I do not use	549 (87.8%)
	Use everyday	57 (9.7%)
	Use 3 x week	14 (2.2%)

The participating members adopted better behaviour choices that would enhance their health and well-being. The majority of members reported they did not use alcohol (97.4%), did not smoke (87.8%) and ate healthy foods such as fruits (63.2%) and vegetables (51.7%) at least three times per week.

(e) Leisure time activities

The leisure time activities of the participating members are presented in Table 4.12. Personal factors such as the involvement in leisure and social, recreational activities directly influence mental health such as enhancing the ability to cope with stress [56], and older persons self-determination [145].

Table 4.12: Leisure time activities on health of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Leisure activities		
Opportunity for leisure activities	Not at all	8 (1.3%)
	A little	52 (8.3%)
	Moderately	161 (25.8%)
	Mostly	367 (58.7%)
	Completely	37 (5.9%)
Spent time engaging in hobby in past month	Yes	461 (73.8%)
	No	154 (24.6%)
	Cannot Say	4 (0.6%) (Missing = 6)
Favourite social & recreational activities involved in*	Farming	20 (3.2%)
	Travelling	128 (20.5%)
	Cooking	426 (68.2%)
	Watching TV	563 (90.1%)
	Gardening	339 (54.2%)
	Listening to radio	507 (81.1%)
	Drama and Acting	15 (2.4%)
	Reading	425 (68%)
	Sewing	263 (42.1%)
	Knitting	290 (46.4%)
	Story telling	158 (25.3%)
	Playing games	233 (37.3%)

Characteristic		Number of members (%)
Watch TV / Listen to radio in past month	Arts & crafts	206 (33%)
	Other [#]	
	Yes	604 (96.6%)
	No	19 (3.0%)
		(Missing = 2)
Gone to prayer group/mosque/place of worship in past month	Yes	584 (93.4%)
	No	38 (6.1%)
	Cannot say	1 (0.2%)
	Other [#]	(Missing = 2)

**multiple responses allowed; [#]information obtained from qualitative questions*

More than half (58.7%) of participating members mostly had the opportunity for leisure activities. They were also involved in various social and recreational activities with 73.8% reporting they spent time engaging in a hobby during the past month. Most of the participants (93.4%) also reported they had attended a place of worship (i.e. church or mosque) in the last month, and some reported they had enjoyed singing in the church choir. However, the most favoured activities were sedentary activities, which included watching television (90.1%) and listening to the radio (81.1%). In addition, members enjoyed various activities that improved their cognitive capacity including their memory. Reading (68%) was the most common pastime activity, while many members also enjoyed baking, crochet, painting and playing a musical instrument.

(f) Perceived mental health

Mental health becomes a struggle for older persons as they try to regain autonomy and independence, especially when a feeling of despair and anxiety dominates their daily lives [155]. The perceived mental health of the participating members is presented in Table 4.13.

Table 4.13: Perceived mental health of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Mental health		
Frequency of negative feelings	Never	5 (0.8%)
	Seldom	32 (5.1%)
	Quite often	44 (7%)
	Very often	320 (51.2%)
	Always	224 (35.9%)
Severity of emotions due to health problems	None	431 (69%)
	Mild	107 (17%)
	Moderate	62 (9.9%)
	Severe	21 (3.6%)
	Extreme/Cannot do	3 (0.5%)
		(Missing = 1)

A large proportion of members often experienced negative emotions such as low mood, despair, anxiety and depression. Although the causes for these negative feelings were not clarified, most members (69%) reported they did not perceive them to be due to their health problems.

(g) Attitudes

Health can be interpreted as reconciliation with how life has become and is associated with personal characteristics [155]. A positive attitude to life, an important part of this process, allows older persons to reconcile themselves with the difficult aspects of ill health and accept their situation [155]. The attitudes of participating members are presented in Table 4.14, after which members' aspirations are presented.

Table 4.14: Attitudes of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Self-perceptions and attitudes		
Rate quality of life	Very dissatisfied	11 (1.76%)
	Dissatisfied	18 (2.8%)
	Neutral	28 (4.5%)
	Satisfied	442 (70.7%)
	Very satisfied	125 (20.0%)
Satisfied with self	Very dissatisfied	2 (0.3%)
	Dissatisfied	3 (0.5%)
	Neutral	14 (2.2%)
	Satisfied	459 (73.4%)
	Very satisfied	147 (23.5%)
Acceptance of bodily appearance	Not at all	4 (0.6%)
	A little	6 (1%)
	A moderate amount	81 (13%)
	Mostly	451 (72.2%)
	Completely	83 (13.3%)
Satisfied with health	Very dissatisfied	6 (0.9%)
	Dissatisfied	22 (3.5%)
	Neutral	45 (7.2%)
	Satisfied	454 (72.6%)
	Very satisfied	98 (15.7%)
How much enjoy life	I do not enjoy life	7 (1.1%)
	A little	3 (0.5%)
	Much	30 (4.8%)
	Not sure	584 (93.4%)
		(Missing = 1)
Feel life is meaningful	My life is not meaningful	13 (2.1%)
	Meaningful a little	13 (1.2%)
	Very meaningful	49 (7.8%)
	Not sure	550 (88.8%)

Overall behaviour pattern and character may play a role in disability at any level [56]. A large proportion of members rated their overall quality of life (70.7%) and health (72.6%) as

satisfactory. They were mostly accepting of themselves (73.4%) and their bodily appearances (72.2%). However, members were uncertain whether their lives were meaningful (88.8%) and whether they enjoyed life (93.4%).

(h) Aspirations

To gain insight into the broader context of members' lives, they were provided with the opportunity to talk about what was important to them and describe how they felt about their future. Most members portrayed later life as a period in which they continued to live engaged lives. However, 18 participants responded with an emphatic 'No plan for the future', while four other participants were not sure as they had not given any prior thought to the statement. Members reported:

'I have no plans for the future'

'I am not sure as I have not given it a thought'.

The remaining participants expressed a broad variety of self-determined aspirations which have been classified into two groups, namely aspirations not reflecting a possible future-oriented behaviour (n=70), and aspirations with possible future-oriented behaviour (n=533). These are described from the qualitative responses of members below.

(i) Aspirations without possible future-orientated behaviour

Reading through the aspirations without possible future-oriented behaviour, three themes were identified:

'Living day-to-day'

Members were most concerned with achieving ordinary things in life by accomplishing day-to-day activities. This may have allowed a sense of some control over what a few regarded as the increasing unpredictability of their lives [156]. Members reported:

'I don't have plans for the future because I live day to day'

'I have no immediate plans, I will take every day as it comes'.

'Satisfaction with circumstances'

Members reported being contented and satisfied with their health and present lives and had no desire to change their circumstances. They wanted a life of happiness and peace and did not want to be a burden to others. Members reported:

'I have no immediate plans, I am satisfied with what I have at the moment'

'I have no future plans, I want my health to remain like it is as I am happy'

'I don't really have plans. I don't want to be a nuisance. My children are grown and have their own children and their spouses are drinkers'.

'Awaiting death'

Many members commented on their own future and were accepting of death. Members reported:

'I am looking forward to being with my deceased husband'

'I want to continue attending the centre and spend time with family, other than that I'm going to die'

'I want to live for God and look forward to meeting God'.

(ii) Aspirations with possible future-orientated behaviour

Reading through the aspirations with possible future-oriented behaviour, six themes were identified that could trigger possible future-oriented behaviours and the accompanying benefits. These included:

'Maintaining or enhancing physical functioning'

Members reported they would like to get involved in activities that capitalise on their functional ability, specifically mobility. They aspired to travel both locally and abroad visiting friends and family or going on tours and excursions with service centres. Members reported:

'I want to travel locally and overseas to visit my children'

'I would like to go on more outings with the service centre'.

Members also indicated they wanted to continue engaging in their hobbies and social activities.

'I want to continue enjoying my fishing and other hobbies'

'I hope to do my needlework and paintings again'.

These aspirations will enhance a sense of companionship through socialisation, as well as a sense of belonging.

'Taking responsibility for personal health and wellness'

Members expressed aspirations that entailed taking personal responsibility for some of the behavioural determinants of their health and wellness to enhance a sense of being in control, by making changes to their lifestyle behaviours. Their aspirations related to participation in physical activity, healthy eating and enhancing cognitive health through improving literacy skills. Members reported:

'I want to live a healthy life, ensuring I eat well and exercise properly'

'I would like to start exercising in an exercise class'

'I would like to run a marathon'

'I would like to participate in Golden Games sports for a long time still'

'I want to learn to read and write'.

'Being relevant in the community'

To preserve a sense of purpose through recognised and valued roles, members aspired to give back to their communities by volunteering their abilities as well as by contributing to the economic activities. Members reported:

'I would like to stay actively involved in community work at the service centre and church'

'I want to do voluntary work with seniors'

'I want to continue to do home visits and deliver religious teachings to people'

'I would like to help my son who is a drug addict to change his ways and give himself to God'.

Members also wanted to contribute to economic activities that improved their financial status and to create business opportunities. Members said:

'I am currently establishing a business that sells compost for the gardens'

'I would like to start a business selling dried fruit and nuts'

'I want to gather money to buy a sewing machine, so I can in turn make money by selling items'.

'Remaining physically and economically independent'

Wishing to avoid a sense of being dependent on others, or wishing to maintain a sense of control, the members aspired to have the necessary resources to maintain a sense of independence. Members reported:

'I would like to have a job to support myself if I could'

'I dream of having a driver's licence to drive a car'

'I would like to have a car of my own so that I have freedom to go where I want to go'.

Members also wanted to live comfortably and independently in their own homes and had made plans to rebuild or make renovations. They commented:

'I would like to apply for plans to build a house'

'I would like to extend my house and build additional rooms to accommodate children who visit'

'I would like my house to be painted'.

'Preparing for the afterlife'

In preparation for the afterlife, the participants expressed aspirations to enhance their spirituality by continuing to engage in religious activities

'I want to continue going to church every Sunday, praising God and doing good to people'

'I want to attend mosque more often for the holy month of Ramadan'

'I want to continue to serve God and spend time in prayer to provide me with good health'.

‘Unable to do things’

Recognising the difficulties in maintaining independence due to inability to continue normal activities, participants acknowledged the need for assistance in relocating to old age residential facilities. Members said:

‘I am waiting for admission to an old age home’

‘When I can no longer live by myself I will move to the old age home’.

Environmental factors

The environment in which members live or operate from may significantly influence their functioning, and it is helpful to explore how it enables or disables the person [148]. These influences can be either positive (facilitator) or negative (barrier), or act as both at the same time. The environments of the participating members, relating to the environmental factors listed in Figure 4.2, are presented below.

(a) Physical environment

Physical environments, as well as safe, adequate housing and neighbourhoods can make a difference between the independence or dependence of an older person, and is essential to their well-being [13]. Nearly three quarters of members (70.6%) felt very safe in their daily lives but were not sure (59.5%) whether their physical environment contributed to their illness or healthy state (Table 4.15).

Table 4.15: Physical environment and living arrangements of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Living arrangements*	Alone	143 (22.9%)
	Spouse	129 (20.6%)
	Children or family	308 (49.3%)
	Extended family	122 (19.5%)
	Other [#]	85 (13.6%)
Reasons for living arrangements [#]	Living alone	
	Living with children/extended family	

Characteristic		Number of members (%)
Contribution of physical environment to illness or health	Contributes to illness	28 (4.5%)
	Contributes to healthy state	219 (35%)
	Not sure	372 (59.5%)
		(Missing = 6)
Feeling safe in daily life	Not at all	15 (2.4%)
	A little	25 (4%)
	A moderate amount	114 (18.2%)
	Very much	441 (70.6%)
	Extremely	30 (4.8%)

* multiple responses allowed; # information obtained from qualitative questions

Members reported various types and rationales for their living arrangements. The living arrangements of participating members are presented in Table 4.15.

(b) Rationale for the current living arrangements of members

Almost 70% of the members resided with their children or extended family members, while a smaller proportion (22.9%) lived alone (Table 4.15). The reasons for members' living arrangements are presented below:

(i) Members' living alone

Some members chose to live alone because they wanted to be independent, make their own decisions and care for themselves. Others did not want to live with their children and be dependent or become a burden to them, while some members chose not to live with their children because they were abused by the children or family. A few members reported that they did not prefer it but lived by themselves because they had no other choice and did not have children or family to reside with that could care for them. Members said:

'I choose to live alone and enjoy my independence. I do not like to be a burden to others'

'I prefer to stay alone. I don't want to interfere in my children's lives'

'I want to be alone as I have a son on drugs and he has stolen too much from me'

'I enjoy my independence and ability to make my own decisions'

'I don't have children to look after me. I don't like living alone'

(ii) Members' living with children or extended family

Members reported that they lived with their children or extended family either to receive some form of care for themselves, or to provide care to their children or extended families. Additional clarifications for these living arrangements are reported below.

To receive care for themselves

Many members clarified that because they had health-related problems, they lived with their children or family to receive the necessary care. Some members also needed financial support, while others chose this living arrangement because they had nowhere else to live. Members also felt unsafe living alone, especially after a divorce or death of a spouse. Members reported:

'I live in my own house. My daughter, her husband and children came to live with me. I had a stroke, so I cannot look after myself'

'I live with my children, so they can care for me as I have health related problems'

'I live with my sister because I have nowhere else to live. I grew up with her. We take care of each other'

'My daughter doesn't want me to live alone. She lives with me for my safety'

'I live with my daughter because my husband passed away and I am scared of living alone'

'My husband and I moved here after we were raped and sodomised and put in witness protection, but eventually I am still living here'. (Communal Living Facility)

To provide care to their children and/or extended families

Some members reported that the rationale for their living arrangement was to support and take care of the needs of their children or families. The type of care needs ranged from financial to physical, social and emotional support. Some members acted as guardians to their orphaned grandchildren and helped support them, while others continued to take care for their own sick or disabled children, and their own parents. The extent of care provided by members for these health-related problems of the adults differed among participants. Members reported:

'I am looking after my two grandchildren as my son and his wife (their parents) passed away'

'My grandchildren live with me for help and financial assistance'

'I live in my own house with my unmarried daughter and my grandchildren. My son also lives with me. He was in an accident and is a paraplegic'

'My son has epilepsy and he lives with me. I enjoy my independence, but I take care of him'

'I am taking care of my mom'.

In addition, members also provided support to their grown-up children who were separated from their spouses, or who were unemployed or homeless. Members mentioned:

'My children live with me for financial reasons. Daughters are not working, and I help take care of them'

'I am living in my own house. My daughter and grandchildren are living with me. My daughter is going through a divorce'

'I am living in my own home. My four children and their children (grandchildren) live with me because they have nowhere else to go'.

(c) Support and relationships

Table 4.16 indicates that most members (74.9%) were satisfied with their personal relationships while interacting with others, and reported no difficulty dealing with people unknown to them (86.3%), or in maintaining friendships (90%). Most members (78.9%) expressed satisfaction in the support they received from friends. In the past 30 days, approximately 90% of members had received visits from friends/relatives, while more than three quarters of the members had had the opportunity to visit friends and relatives (88.3%) and render some form of support to them (61.9%). The type of support rendered was not specified.

Table 4.16: Support and relationships of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Satisfied with personal relationships	Very dissatisfied	4 (0.6%)
	Dissatisfied	11 (1.8%)
	Neutral	19 (3%)
	Satisfied	468 (74.9%)
	Very satisfied	123 (19.7%)

Characteristic		Number of members (%)
Difficulty dealing with people not known	None	539 (86.3%)
	Mild	52 (8.8%)
	Moderate	22 (3.5%)
	Severe	7 (11.1%)
	Extreme/Cannot do	4 (0.6%)
		(Missing = 1)
Difficulty in maintaining friendship	None	563 (90.0%)
	Mild	38 (6.1%)
	Moderate	18 (2.9%)
	Severe	5 (0.8%)
	Extreme/Cannot do	1 (0.2%)
Satisfied with support from friends	Very dissatisfied	6 (1%)
	Dissatisfied	8 (1.3%)
	Neutral	21 (3.4%)
	Satisfied	493 (78.9%)
	Very satisfied	97 (15.5%)
Received visits from friends/relatives in past month	Yes	568 (90.9%)
	No	55 (8.8%)
		(Missing = 2)
Visited friends/relatives in past month	Yes	552 (88.3%)
	No	70 (11.2%)
		(Missing = 3)
Helped family or friend or neighbour in past month	Yes	387 (61.9%)
	No	231 (37%)
		(Missing = 7)

(d) Service accessibility

Formal and informal social structures and services have an impact on individuals in a community [148]. Services provide benefits, structured programmes and operations to meet the needs of individuals. Access to services, information and transport are presented in Table 4.17.

Members reported that information they needed in day-to-day life was readily available to them most of the time (62.6%) and expressed satisfaction with their transport (71.8%) and access to health care services, such as hospitals and clinics (72%).

Table 4.17: Access to information, services and transport of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Availability of information needed in day-to-day life	Not at all	10 (1.6%)
	A little	49 (7.8%)
	Moderately	146 (23.4%)
	Mostly	391 (62.6%)
	Completely	27 (4.3%)
		(Missing = 2)
Level of satisfaction with access to hospitals or clinics to receive health care	Very dissatisfied	9 (1.4%)
	Dissatisfied	30 (4.8%)
	Neutral	35 (5.6%)
	Satisfied	450 (72%)
	Very satisfied	99 (15.8%)
		(Missing = 2)
Satisfied with transport	Very dissatisfied	5 (0.8%)
	Dissatisfied	28 (4.5%)
	Neutral	29 (4.6%)
	Satisfied	449 (71.8%)
	Very satisfied	113 (18.1%)

Body structure and functions

Body functions are the physiological aspects of body systems, while structures are the anatomical support [148]. The body functions of the participating members relating to the factors listed in Figure 4.2 are presented below.

(a) Mental function

Mental functions refer to functions of the brain that include both global (consciousness, energy and drive) and specific mental functions (memory, language and calculation) [148].

Table 4.18 depicts aspects of mental and cognitive function that may affect activities and participation of members of service centres.

Despite frequent depressive symptoms, more than half (62.1%) of members reported that they were able to concentrate very well, (79%) could follow a conversation, (64%) had a moderate amount of energy for everyday life and (54.1%) were satisfied with their sleep.

Table 4.18: Mental and cognitive function of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Energy for everyday life	Not at all	10 (1.6%)
	A little	26 (5.8%)
	Moderately	400 (64%)
	Mostly	158 (25.3%)
	Completely	0 (0%)
		(Missing = 2)
Satisfaction with sleep	Very dissatisfied	8 (1.3%)
	Dissatisfied	46 (7.4%)
	Neutral	96 (15.4%)
	Satisfied	338 (54.1%)
	Very satisfied	137 (21.9%)
Ability to concentrate	Not at all	18 (2.9%)
	A little	29 (4.6%)
	A moderate amount	153 (24.5%)
	Very much	388 (62.1%)
	Extremely	33 (5.3%)
		(Missing = 4) 494 (79.0%)
Can you follow conversation?	Yes	122 (19.5%)
	Yes, not always	5 (0.8%)
	No, never	1 (0.2%)
	Not sure	(Missing = 3)

(b) Sensory function and pain

Sensory functions include functions of the senses, seeing, hearing, tasting and sensation of pain [148]. Table 4.19 depicts aspects of sensory function that may affect participation and activities of members of service centres.

Thirty six percent of members reported that physical pain had to a large extent prevented them from doing what they needed to do. However, 72.3% of members perceived their hearing abilities to be good and about 68% reported no difficulty with vision, and 74.6% did not lose control of bladder function. A large proportion of members (93.6%) reported they could stand and balance without support for one minute but 68.8% could do so for 30 minutes.

Table 4.19: Sensory function and pain of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Physical pain preventing what needs to be done	I have no physical pain	55 (8.8%)
	Pain has not prevented me	180 (28.8%)
	A little extent	6 (1%)
	Much extent	217 (34.7%)
	Not sure	167 (26.7%)
Difficulty with distant vision	None	398 (63.7%)
	Mild	105 (16.8%)
	Moderate	92 (14.7%)
	Severe	24 (3.8%)
	Extreme/Cannot do	5 (0.8%)
		(Missing = 1)
Difficulty with near vision	None	425 (68.0%)
	Mild	98 (15.7%)
	Moderate	84 (13.4%)
	Severe	13 (2.1%)
	Extreme/Cannot do	4 (0.6%)
		(Missing = 1)
Can you hear	Yes, hearing good	452 (72.3%)
	Yes, not always	170 (27.2%)
	No, never	2 (0.3%)
	Not sure	0 (0%)
		(Missing= 1)

Characteristic		Number of members (%)
Lose control of bladder	Yes	147 (23.5%)
	No	467 (74.6%)
	Not sure	9 (1.4%)
		(Missing = 2)
Stand without support – 1 min (balance)	Yes	585 (93.6%)
	No	36 (5.8%)
	Not sure	3 (0.5%)
		(Missing = 1)
Difficulty in standing for 30 minutes (balance)	None	429 (68.8%)
	Mild	66 (10.6%)
	Moderate	68 (10.9%)
	Severe	52 (8.3%)
	Extreme/Cannot do	9 (1.4%)
		(Missing = 1)

Activities and participation

Activity is defined as the execution of a task or action by the individual, whereas participation is the involvement in a life situation [148]. Every action, particularly when executed in a social environment, may be considered participation, and participation always entails the execution of an action or task [147, 157]. The performance of activity or level of participation of members relating to the domains listed in Figure 4.2 are presented below.

(a) General tasks and major life areas

General tasks and major life areas of participating members are presented in Table 4.20. General tasks refer to the ability to carry out single or multiple tasks, organising routines and handling stress. These tasks can be used in conjunction with more specific tasks or actions to identify the underlying features of the execution tasks under different circumstances [148]. In major life areas, the tasks and actions are required to engage in education, work and employment [139].

Table 4.20: General tasks and major life areas of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
General tasks		
Difficulty learning new task	None	448 (71.8%)
	Mild	60 (9.6%)
	Moderate	76 (12.2%)
	Severe	28 (4.5%)
	Extreme/Cannot do	12 (1.9%)
		(Missing = 1)
Satisfaction with ability to do daily activities	Very dissatisfied	6 (1%)
	Dissatisfied	15 (2.4%)
	Neutral	49 (7.8%)
	Satisfied	486 (77.8%)
	Very satisfied	68 (10.9%)
Major life areas		
Satisfied with capacity for work	Very dissatisfied	4 (0.6%)
	Dissatisfied	18 (2.9%)
	Neutral	59 (9.4%)
	Satisfied	487 (77.9%)
	Very satisfied	57 (9.1%)
Difficulty in day to day work	None	524 (83.8%)
	Mild	47 (7.5%)
	Moderate	37 (5.9%)
	Severe	14 (2.2%)
	Extreme/Cannot do	3 (0.5%)

More than three quarters of members reported that they never experience difficulties with learning new tasks (71.8%) and were satisfied in their abilities to do daily activities (77.9%) and work (83.3%). Members reported they had no difficulty in the performance of their day-to-day work (83.8%).

(b) Mobility, self-care, domestic life and interpersonal relationships

Mobility, self-care, domestic life and interpersonal relationships of participating members are presented in Table 4.21.

Mobility is defined as changing body position or location (e.g. walking, running, climbing, etc.) whereas self-care refers to actions that entail caring for the self and body parts (e.g. washing, drying, dressing etc.) [148]. Areas of domestic life include acquiring a place to live, food, clothing and other necessities, household cleaning and repairing, and caring for personal and other household objects [148]. Interpersonal relationships are about carrying out the actions and tasks required for basic and complex interactions with people in a contextually and socially appropriate manner [148].

Approximately 88% of the members reported they were mobile and able to walk without support for 10 minutes. They had no difficulties with activities of self-care such as washing themselves (91.8%) or getting dressed (94%). In terms of domestic life activities, nearly three quarters of members had no difficulty in doing activities around the home. In terms of personal relationships, most members indicated they were neither satisfied nor dissatisfied with their sex life (66.9%).

Table 4.21: Mobility, self-care, domestic life and interpersonal relationships of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Mobility		
Walk without support – 10 min	Yes	549 (87.8%)
	No	70 (11.2%)
	Not sure	5 (0.8%)
		(Missing = 1)
Self-care		
Difficulty washing body	None	574 (91.8%)
	Mild	20 (3.2%)
	Moderate	17 (2.7%)
	Severe	11 (1.8%)
	Extreme/Cannot do	3 (0.5%)
Difficulty getting dressed	None	588 (94%)
	Mild	13 (2.1%)
	Moderate	12 (1.9%)
	Severe	8 (1.3%)
	Extreme/Cannot do	3 (0.5%)
		(Missing = 1)

Characteristic		Number of members (%)
Domestic life		
Difficulty with house activities	None	461 (73.8%)
	Mild	76 (12.2%)
	Moderate	67 (10.7%)
	Severe	20 (3.2%)
	Extreme/Cannot do	1 (0.2%)
Interpersonal relationships		
Satisfied with sex life	Very dissatisfied	2 (0.3%)
	Dissatisfied	18 (2.9%)
	Neutral	418 (66.9%)
	Satisfied	169 (27%)
	Very satisfied	7 (1.1%)
	(Missing = 11)	

(c) Community, social and civic life

Community, social and civic life of participating members are presented in Table 4.22. Community participation entails engagement in all aspects of community social life, such as engaging in charitable organisations, service clubs or professional social organisations [148], as well as performance of activities in relation to a person's town, city or local area. Participation is estimated by the performance of an individual in his current environment [60].

A majority (78.9%) of members had no difficulty in joining community activities. Nearly half of members were to some degree, and in different ways and times, engaged in their communities through their involvement in volunteer activities. According to WHO (2002), voluntary work gives older people the opportunity to make significant contributions to their communities [13]. More than a quarter of the members had participated in some form of unpaid community volunteer work within the last month. One of the members' favourite volunteer activities included babysitting (12%).

Table 4.22: Community, social and civic life of members of service centres who participated in study (n=625)

Characteristic		Number of members (%)
Difficulty joining in community activities	None	493 (78.9%)
	Mild	45 (7.2%)
	Moderate	68 (10.9%)
	Severe	13 (2.1%)
	Extreme/Cannot do	6 (0.9%)
Engagement in Community	Yes	218 (34.9%)
	No	323 (51.7%)
	Sometimes	73 (11.7%)
	Not sure	5 (0.8%)
	No response	5 (0.8%)
		(Missing = 1)
Unpaid community/volunteer work in the past month	If yes, explain [#]	
	Yes	204 (32.6%)
	No	415 (66.4%)
Favourite volunteering activities*		(Missing = 6)
	Driving	41 (6.6%)
	Baby sitting	75 (12%)
	Other [#]	

* multiple responses allowed; [#] information obtained from qualitative questions

(i) Volunteer community participation

The type of community activities and reasons for members' involvement are presented in this section (Table 4.22) from qualitative information collected from participants.

Members reported that they participated in volunteer work to assist people in need, through organisations, the structures of the church, service centres, hospitals and libraries, or in their personal capacities. They acted as consultants and offered advice to municipalities and organisations, while serving on various committees and attending required meetings. These included the Salvation Army, Hospice, and Society for the Prevention of Cruelty to Animals, Rehabilitation Centres for drug addicts, Age in Action, Older Persons Forum, Anglican Woman's Fellowship, Street and Residents Committee, Women's League, Pensioners Clubs/Service Centres, Rate Payers Associations and Burial Societies.

Many members took pleasure in assisting people who were sick or poor by lending them money, providing them with housing and gardening services, and donating cooked food and other items to them when needed. Members reported they cared for the sick in the community by providing them with transport to collect their medication or for check-ups at hospital, and to do shopping for them. Further support services were provided in the form of sewing and laundry of their clothing as well as cleaning of their homes. Physical assistance to the sick in the community was also offered via home visits in terms of toileting and mobilisation. Members participated in community organisations called 'neighbourhood watches' to provide security to homes, and reported involvement in fundraising activities for example, knitting, sewing, baking and handiwork.

(ii) Involvement in religious activities

In terms of religious activities, a large emphasis was placed on involvement in church and community activities. Many members did ministerial work as pastors and deacons that also required them to travel and deliver religious teachings, advice and prayer. They often donated money to churches and attended, assisted and participated in events, fundraising activities and social gatherings at the church. Members sometimes provided 'Sunday school' classes and taught others to sing in choirs, cooked for bazaars and soup kitchens, and recruited people to church. As patrons of the church, some members did maintenance work and odd jobs, and served on various committees.

(iii) Involvement in service centre activities

With regard to members' involvement at service centres, many reported they prepared tea and meals, assisted with fundraising and administration and served as committee members. They often attended activities and various meetings at the service centre. Some were involved with arts and crafts, some managed the shop at the service centre, while others attended activities at other service centres.

(iv) Involvement with activities for children and the youth programmes

Members of service centres seemed to place tremendous importance on their involvement with children and youth programmes in the community. Their activities included imparting religious teachings and motivational talks at schools, mentoring, advising and counselling the

youth, as well as teaching reading and giving care to children after school. In addition, members assisted with fundraising at schools and made food parcels to feed children. Some also fostered children and took care of their grandchildren.

(v) Involvement in education, and health and wellness initiatives

Further engagement in their communities, saw members of service centres involved in health and wellness initiatives like providing foot care ('to prevent health complications'), hair care and massage services, as well as playing music for older persons. Community sports involvement included walking groups, playing games with older persons, competing in competitions and working with community sports teams. Time was also spent on tutoring the community on literacy and teaching methods (i.e. teaching people to read and write), first aid training, as well as personally attending workshops and training initiatives.

In conclusion, members engaged and participated in a variety of activities within their communities. This ranged from voluntary involvement in various organizations, including service centres, as well as religious activities, programmes for children and youth, education, and health and wellness initiatives.

CHAPTER 5 DISCUSSION

5.1 Introduction

The aims of this two-phased study were to explore the characteristics of Service Centres for Older Persons in the Western Cape Province and the profile of the members of these centres. This entailed exploring the organisational structures of the centres, the types of services offered, the profile of the managers of the centres and their perceptions of the needs of members of the centres. The second phase of the study explored the socio-demographic profile, health and psychosocial characteristics of members of the centres.

The findings of the two phases of the study are discussed as a response to the WHO recommendation that stipulated that by the first half of the 21st century, member countries should have evaluated how applicable the 2002 Active Ageing Policy Framework is to their countries [15]. This chapter discusses aspects of the services provided by senior service centres as outlined in the WHO Framework on Active Ageing.

5.2 Application of the WHO Active Ageing Framework

The six determinants of the WHO active ageing framework relate to health and social services, behaviour, personal factors, physical environment, social environment and economic state were used as a base to investigate service provision to older persons at service centres[13]. The programmes available at the service centres are highlighted below in the different domains:

5.2.1 Health and social services

The AAPF proposes that health systems need to take a life course perspective that focuses on health promotion, disease prevention, equitable access to quality primary health care and long-term care [13].

Service centres in this study successfully provided screening programmes to prevent and manage chronic illnesses. These programmes were provided by nurses affiliated to a primary health care centre nearest to the service centre. Screening programmes were, however, limited and mostly focused on the detection of conditions such as hypertension and diabetes

mellitus, even though a large percentage of members suffered from multimorbidity (Table 4.9). Despite limited programmes at the centres, priority needs of members were addressed as most of their self-reported health problems included hypertension, arthritis and diabetes (as diagnosed by a health care professional). Since most staff at service centres were volunteers, it is possible that service centres lacked the human resource capacity and trained professional staff to extend the scope of screening programmes offered. This is in contrast to modernised health care systems in developed countries where screening for geriatric syndromes and multi-dimensional assessment is more recognised [158]. This could also possibly be the reason why no services focusing on primary and secondary prevention strategies for chronic conditions were provided. Thus, the quality of testing/screening for chronic conditions, despite not being clarified in this study, still needs to be addressed if services at service centres in the Western Cape are to align themselves to the goals of the framework.

The WHO highlights the importance of curative services provided by the primary health care sector [13]. Despite most members (72%) reporting they were satisfied with their access to health care services, they had no access to curative health services at service centres and reported they were referred to secondary and tertiary levels of care as required. Curative services are not part of the mandate of the services of the centres, even though it is recommended by the framework. According to the WCDS (2015), there are limits to what can be achieved without buy-in from other provincial departments. It is therefore recommended that there should be interdepartmental collaboration and engagement between the WCDS and stakeholders to deliver integrated service delivery to older persons [8]. Furthermore, the framework acknowledges the shift in the global burden of disease and the inadequacy of present acute care models to address health needs of older persons [13]. It highlights the future increase in demand for medication to delay and treat these chronic diseases. Thus, service centres, as organisations representing older persons, could provide members with accessibility to medications if adequate resources (physical, human and financial) are available. In order to improve quality of care, it is therefore important that the Department of Health (DoH) is involved in bringing primary health care services to older persons at the level of community-based care (i.e. the service centres) [8]. According to the WCDS (2015), certain non-governmental organizations (NGO's) are already providing a

primary healthcare service to older persons, relieving the pressure on the public health system [8]. It is therefore important that the WCDSO collaborate with the DoH to facilitate the development of packages of care for older persons, detailing essential health services older persons can reasonably expect at primary, secondary and tertiary facilities [8]. However, despite the deficiency in curative services, managers reported member involvement in specific sporting and associated activities that forms part of the active ageing programme at service centres. Centre participation in the Golden Games and City of Cape Town games were preventative health services that promoted the benefits of physical activity and social integration [8].

The framework emphasises that both informal and formal health and social services should be provided to those members who are unable to care for themselves [13]. In response, service centres offered members home visits conducted by volunteers at the centre (Table 4.2). The framework emphasises that these volunteers should receive ongoing training and education on how to care for people as they age. Although the need to train volunteers exist, this study observed that there is only a small percentage of service centres that provided training to these caregivers. However, the type, content and duration of this training was not explored and could thus not be specified. This paucity of training was possibly due to a lack of professional expertise to provide the training or inadequate facilities within which to conduct such training.

The framework also suggested that formal caregivers must be provided with adequate remuneration and working conditions if service centres were expected to retain support for members [13]. This may be especially relevant to service centres in the Western Cape, South Africa as most support is received from volunteers (Table 4.1) and given the country's slow economic growth [7], caregivers may be forced to seek employment to maintain a sufficient standard of living that meets their expectations, thus impacting the delivery of programmes at service centres that could be provided.

Programmes that promote mental health and social connections are as important as those that improve physical health status [13], and are an integral part of long-term care. Although the definition of mental health is itself culture bound [27], having religious faith seemed to help older persons accept past lives, give them strength in the present and make them less

anxious about their future [156]. However, similar to in a study by Drewnowski *et al.*, (2003), service centres, apart from religious activities, did not provide routine mental health screening for members despite data reporting a high frequency of perceived negative emotions such as low mood, despair, anxiety and depression (Table 4.13) [27]. Mental health becomes a struggle for members to regain autonomy and independence, especially when negative emotions dominate their daily lives [155]. Promoting mental health offers a promising route to improving health related quality of life [27]. The provision of comprehensive mental health services thus needs to be addressed at service centres in more detail in the future.

In summary, with an expected increase in the life expectancy of older persons and inevitable growth of the older population in South Africa, there will be an increased demand for long term and chronic health care [7]. The health status and risk profiles of members will thus be dramatically influenced by the capacity of the clinical and public health systems available to them. The framework highlights that countries such as South Africa need to develop a continuum of affordable, accessible, high quality and age-friendly health and social services that address the needs and rights of members [13]. However, service centres in the Western Cape tended to be limited in the health and social services they provide and are only partially effective in meeting the needs of its members. It is therefore important for service centres to prepare in all areas for the increasing demand for health services for age related health conditions that could support members independent living in communities. Thus, to prevent and reduce the burden of disability due to chronic diseases, screening programmes need to be more comprehensive and holistic, and should address both the physical and mental health needs of members since the ability to perform activities of daily living is also related to mental health status [27]. However, since there are no routine mental health screening tools for older persons at the primary level of care [27], this needs to be developed. In addition, to further sustain and provide access to health and social services to members who cannot attend, service centres need to consider the provision of training, support and remuneration for their caregivers.

5.2.2 Behaviour

Members need to have access to opportunities to learn about and use technologies to improve their health literacy since rapid technological changes in society will most likely

impact on their health status and health services [29]. Since most members have not completed high school and live in poverty, they have a higher risk of having low health literacy [35]. Therefore to promote health literacy and participation of members in communities, the framework highlights the need to provide basic education and learning opportunities throughout the life course [13]. Education programmes for members were offered in more than 60% of service centres but no clarity provided insight into the content of these programmes (Table 4.3). It is therefore possible that the education provided may have been relevant and was targeting behaviours that impact on healthy lifestyles. Although more research focusing on these aspects at service centres is needed to be conducted in the future, it is known that physiotherapists can play a vital role in the promotion of health and wellness of members through various education programmes [120].

Given that non-communicable disease is the leading cause of morbidity, disability and mortality of populations across the world, the framework emphasises the need to address the risk factors [13]. Thus, engaging in health-promoting behaviours such as appropriate physical activity and healthy eating, abstaining from smoking, using medication wisely and being screened regularly is important in delaying or preventing the emergence of diseases and functional decline, and in improving quality of life [13]. According to the findings from this study, service centres are doing well in providing a variety of sports and exercise programmes and physical activities. Dance and/or aerobics, as well as walking programmes seemed to be the most common activities, while swimming and/or water aerobics occurred in only one centre (Table 4.3). While more than half the members highlighted walking (455/625) and exercise classes (397/625) as their favourite activity, only 5% (n=32) indicated that they participate in swimming. High participation in walking may be because members and service centres found it to be a cost-effective way to exercise that required little financial resources. Members' non-participation in swimming could be because most service centres did not have swimming facilities, or they did not know how to swim. It is also possible that members' engagement with certain physical activities could have been influenced by their level of motivation and personal beliefs, as well the availability of public transport to facilities towards and away from the service centres. Furthermore, members' past falls could have increased their anxiety about participating in activity and exercise. However, being active can help older people reduce the risks of falls, hence greater physical and economic benefits with substantial

associated lower medical costs [13]. Various other factors could also impact members' participation and choice of physical activity at service centres. These include limited infrastructure and resources (i.e. physical and financial), the facility itself and location thereof, as well as the availability of staff, instructors, and programmes[159]. Since physical design and social elements within service centres can have a therapeutic effect on members' wellbeing [25], it would therefore be useful to consider redesigning and building more modern facilities to accommodate for much needed services in the future.

The framework puts emphasis on the importance of healthy eating and acknowledges one of the causes of malnutrition in old age is limited access to food. Similar to what was indicated in studies in the United States (48), service centres responded by providing members access to meals. However, the quantity and nutritional value was unclear. As a result, programmes related to nutrition and healthy eating could not be confirmed in this study. Members, however, reported that they do consume fruits and vegetables three times per week but were not asked in this study where they obtained it. It could thus not be confirmed if they obtained it from the service centre. It was also not known who advises the centre on healthy eating. It would therefore be useful to conduct further research at service centres to develop culturally appropriate, population-based guidelines for healthy eating as proposed by the framework.

Since medication is used to prevent and treat chronic diseases, members need to know its side effects and how it impacts on their health, as well as the importance of taking it as prescribed. Despite this, less than half of service centres provided education to members on the safety of medication use or provided access to health services that addressed challenges relating to adherence or iatrogenesis (Table 4.3). It is possible that self-medication can also lead to iatrogenesis. Fortunately, from the large proportion (537/625) of members that used medication, more than three quarters (533/625) were aware of the reasons for taking them.

Despite the framework recommendation, service centres did not include addressing oral health, possibly due to a lack of resources. The negative impact of tobacco and alcohol use on their health was also not addressed. This could be due the fact that most members reported they did not use these substances. However, young people who comprise the next generation of older persons, and who may become future members of service centres, are known to engage in these risky behaviours that will impact their health [160]. Managers of service

centres therefore need to be conscious of this in planning of services for the next generation of members. In addition, for members who do smoke and drink alcohol, quitting would prove beneficial as it would enhance their active ageing [43]. They therefore need to be educated about this.

In summary, social and environmental factors play key roles in influencing health behaviours and addressing risk factors that can be modified. It is therefore important for service centres to provide programmes that reduce risk factors associated with major diseases and increase factors that protect the health of members. A balanced perspective is therefore needed that incorporate education and programmes on healthy eating, oral health, alcohol and tobacco use, and the use of medication.

5.2.3 Personal factors

Personal influences such as genetics and psychological factors have an impact on health and longevity [3]. Although the framework reports on genetics to some extent being involved in the causation of disease, no services were provided at service centres to assess members' risks. Although it may not be within the scope of service centres to conduct genetic testing, it may be beneficial to provide education to members on the awareness of genetics and its role in disease, so that members can have a better understanding of their disability.

Psychological factors were a vital component of active ageing as nearly all service centres provided services to enhance members' cognitive skills through arts and craft activities (Table 4.3). This is in agreement with related research on active ageing which showed the importance of stimulating the mind and having psychological resources [45]. Similarly to Mapuma's 2014 study, members' personal factors had an impact on active ageing through their participation, self-fulfilment and independence [14]. In his study, Mapuma (2014) found that low self-esteem was a problem as it inhibited older persons' full participation in several activities taking place either at community or at society level [14]. In contrast, the findings of this study revealed that members generally reported positive self-perceptions and attitudes to life (Table 4.14). They were involved in leisure activities and had no difficulty in engaging in community activities (Table 4.12). Since leisure is social by nature, leisure participation can facilitate the development of companionship and friendship, and consequently strengthen beliefs about the availability of social support [82].

A large proportion of members rated their quality of life (442/625) and health (454/625) as satisfactory, despite living in poverty, and were mostly accepting of themselves and bodily appearances (Table 4.14). This could be attributed to the fact that most older persons that regularly attend service centres have generally higher levels of health and life satisfaction [161] and tend to over rate their health [19]. The framework recommends that older persons need to be encouraged to be self-efficient and develop coping styles to adapt to transitions in life [13]. However, meaning in life has been associated with a range of health outcomes in older persons, including better self-rated health, enhanced psychological well-being, a lower risk of experiencing anxiety and depression, and the adoption of beneficial health behaviours [162-165]. Most members were satisfied with themselves although were not sure if they enjoyed their lives or if they were meaningful (Table 4.14). These findings were in contrast to a study by Dhurup *et.al*, (2009) who reported concern for the high reported incidence of life dissatisfaction among older persons, as the possible lack of meaningful participation in leisure activities [82]. In a study by Wong (2003), older persons with higher income or those who were financially stable were more satisfied with life than those with lower incomes [166]. However, in this study, despite experiencing poverty, most members portrayed later life as a period in which they wanted to continue living engaged lives and expressed a broad variety of self-determined aspirations with possible future-orientated behaviour (e.g. travelling, serving communities, working with the youth etc.). Realistic self-determined aspirations contribute to keeping individuals 'behaviourally engaged in life', providing reasons for aspiring to a behaviour [164, 167]. This may contribute to the ability of members to maintain control over their own development in accordance with the goals of the framework. However, members who expressed aspirations with no future orientated behaviour should not be ignored as they could be uncertain about the meaningfulness in their lives [168]. This could have possibly been affected by their experiences during the apartheid era [121] or because older persons may have become 'invisible' due to a predominantly youthful population [169]. However, since physiotherapists have a key role to play in promoting health and wellness in older persons [118, 120], an awareness of the self-determined aspiration of members could help develop optimal practice in the area of health promotion at service centres. Physiotherapists can ensure that services provided at service centres are best suited to the aspirations of members. It is therefore imperative that managers take cognisance of these factors in planning future

services at service centres so that programming can be relevant to the diverse needs of members

In summary, the lifelong trajectory of health and disease for individuals is the result of a combination of genetics, environment, lifestyle, nutrition and chance [13]. It is therefore imperative that members of service centres are appropriately educated on how to modify the influence of heredity on functional decline and onset of disease. Furthermore, it should be noted that members experiences and attitudes throughout life may have affected their individual circumstances and perceptions. Thus, some members found that living in the present was more meaningful while others had aspirations for the future.

5.2.4 Physical environment

The goal of the framework is to provide safe, adequate housing to assist older persons to remain within communities [13]. Characteristics of the physical environment in which members live differed and potentially influenced their perceptions of their health, level of independence and participation in family and community life. However, most members reported they were not sure if their physical environment contributed to their illness or health (Table 4.15). The findings of this study do not correspond with the goal of the framework to provide safe, adequate housing to assist older persons to remain within the communities [13]. The South African government aims to provide housing subsidy schemes to support older persons [7]. However, only a quarter of service centres provided members with information on housing, of which the details were undetermined. If the South African government is to achieve its goal of minimising the number of older persons entering old age homes, and keep members integrated into communities, the challenge facing adequate housing needs must be addressed at service centres in the future. Service centres could provide programmes that empower and educate members on housing application processes (including referral pathways) and assist them to complete the required administrative forms.

Despite the fact that nearly three quarters of members felt safe in their daily lives (Table 4.15), it is well known that older persons are often exposed to criminal activity within communities, especially in the Western Cape [170]. However, service centres did not address aspects related to safety of neighbourhoods in their programmes. Therefore, in partnership with community organisations and various service providers, service centres need - to introduce public

information and awareness campaigns that address the need for example, safe public parks and other public spaces, in addition to the installation of sidewalks and streetlights [171].

Worldwide there is an increasing trend for older persons to live alone; however, this differs among countries [13]. Less than a quarter of the members reported living alone, while half lived with children or family to receive care for themselves, or to provide care to their children or extended families (Table 4.15). Irrespective of members' living arrangements, the framework recommends that members live in proximity to family members, and should have access to services and transportation as this could mean the difference between social interaction and social isolation [13]. Although improving access to service centres is the foundation to any future sustainable model of care [8], the lack of available and affordable transport is one of the key reasons older persons do not attend service centres [8]. In response to this, more than half of service centres provided transport to its members. The mode of transport was provided in the form of buses, minibuses or motor vehicles and differed between centres. Thus, some service centres who did not provide transportation to members possibly lacked the financial resources to afford and sustain such a service. Despite this, if efforts need to be made to ensure members remain integrated in their communities, as suggested by the framework, the SA Government must extend its support to all service centres by fulfilling their need for transportation.

Hazards within the physical environment are also known to have a negative impact on older persons [13]. According to the framework, the majority of injuries such as falls are preventable and most often occur in the home environment [13]. Despite most members reporting they had not fallen within the last year, they did have a fear of falling (Table 4.10). Members who had fallen indicated it was due to slipping on surfaces, fainting, losing balance due to weakness, lack of adequate support and unforeseen circumstances. The physical environment thus remains a risk for falls. Service centres have not included in their services any education or guidelines on falls prevention. Given that falls are known to affect the physical and psychological wellbeing of older persons [172], this type of intervention would help address the risk factors.

Furthermore, characteristics of the environment such as the air quality and cleanliness, in addition to clean water and safe foods [13] are important to prevent chronic illness in older

persons [13, 173]. However, no comprehensive services on the environment were provided to members of service centres to address these needs. It would therefore be useful for members to be educated on the impact of these factors on their health in the future.

In summary, the physical environment can make the difference between members' independence and dependence. To ensure that members remain active within programmes at service centres and within their communities, their safety and protection is of utmost importance. Hazards in the physical environment can lead to debilitating injuries amongst members, thus influencing their level of engagement. The multiple physical barriers therefore need to be addressed by providing information on safe adequate housing and transportation to access service centre activities and health services.

5.2.5 Social environment

Older people are more likely to lose family members and friends and be more vulnerable to loneliness, social isolation and social support [13, 35]. Social interaction is therefore an important component of active ageing [71]. In its totality, social interaction is known to have some level of influence on the physical and mental health of older persons and is critical to their wellbeing [71]. According to the framework, social support, opportunities for education and lifelong learning, peace, and protection from violence and abuse are key factors in the social environment that enhance health, participation and security of older persons [13].

In relation to the WHO determinant 'social environment', all service centres that participated in this study played an important role by providing social support programmes and facilitating integration, as mentioned by others [32, 40, 89]. These included outreach programmes, guardianship for members, recreational and inter-generational programmes (Table 4.4). Further social support was extended in the form of home visits to provide meals and religious activities. Faith gives meaning and structure to people's lives, and through praying, they gain comfort and consolation [174]. Religious activities thus enabled members to engage with their spirituality to find peace with themselves. In addition, support groups provided emotional strength through supportive social connections as recommended by the framework [13]. Most members (446/625) reported they had adequate social support although the type of support was not clear (Table 4.8). They were satisfied with their personal relationships and support received from friends, and had no difficulty dealing with unknown people or

maintaining friendships. This could possibly be attributed to differing cultural values of older persons in the Western Cape but needs to be verified. According to the framework, cultural values and tradition determine to a large extent how members age because they influence all the other determinants of active ageing [13]. Unlike in high income countries where there is a trend of older persons living alone and independently, most of the members (308/625) lived with their children and family members as a preferred way of living (Table 4.15). This was similar to the cultural norm in most Asian countries where extended families live together in multigenerational households [13], possibly providing more social support.

Since members are also vulnerable to crime and abuse, the framework recommends that sustained efforts are to be made to focus on increasing public awareness of this problem. Service centres did not provide programmes that focused on empowering members to recognise when their human rights had been violated. It would be useful for service centres to increase awareness of the injustice of elder abuse through public information and awareness campaigns. The framework suggests the involvement of media, young and older persons to achieve this goal. In addition, the training of law enforcement officers, health and social service providers, spiritual leaders, advocacy organisations and groups of older persons (such as members) to recognise and deal with elder abuse is recommended by the framework [13]. This study did not explore if these services were already provided by service centres. It would therefore be useful to further investigate training opportunities for communities.

The framework also recognises that low levels of education and literacy are associated with increased risk for disability and higher rates of unemployment [13]. Like young people, older people need training in new technologies since access to health information has shifted from more traditional resources such as books, magazines and broadcast media, to online websites [175]. Without literacy, members may have trouble finding and using health information to support their decision-making. Nearly half the current cohort of members are illiterate and had only a primary school education, with just six percent having tertiary qualifications (Table 4.8). However, the quality of life and life satisfaction of members is and could be further improved if they continue learning in later life [29]. Programmes at some service centres therefore provided members with education and learning opportunities so they could remain engaged in meaningful and productive activities. Apart from education on healthy lifestyles, only a small number of service centres provided members with ABET training. Given that it is

anticipated that the next generation of members of service centres will be IT literate, more educated and have developed skills, programmes at service centres will need to be better prepared to cater for their needs in the future.

In summary, service centres recognise the importance of social support to overcome many barriers members face within their social environments. From home visits and support groups, to meals provision and spiritual guidance, a network of social integration is introduced to members who may otherwise be physically and emotionally isolated. Despite this, programmes at service centres that promote an awareness of the abuse of older persons is limited. This needs to be addressed if members are to be empowered to make autonomous decisions about their lives. Furthermore, since members may face many health decisions requiring their active and involved participation, more service centres need to include accessibility to health information in their programmes and focus on health literacy for members who want to guide their own health care.

5.2.6 Economic state

The AAPF emphasises the need to provide services that address the social, financial and physical security needs of older persons [13]. Although financial stability has an important influence on older persons' wellbeing [35], poverty is prevalent in older populations [176]. Many older persons do not have reliable or sufficient incomes or social protection, and often rely on their families for support [13]. The framework thus recommends that countries develop mechanisms, such as the national old age pension in South Africa, to provide social protection for older persons who are unable to earn a living [3]. Nearly all members (619/625) received an old age grant/ means-tested pension as a source of income to care for themselves (Table 4.8). However, service centres do not support or provide education to members about the processes (e.g. how to apply) and safety of their pensions (e.g. how to safeguard against theft and abuse), neither do they provide accessibility to these pensions. This could possibly be due to a lack of resources and trained staff to provide this service. Service centres thus need to explore training and mentorship opportunities to support the capacity building of their members, staff and caregivers through collaboration with other organizations. It would also be useful to develop key minimum requirements for managers and staff level of skills; however, this needs further exploration as it was not assessed in this study.

Members also need to be recognised and actively participate in economic development activities, formal and informal work and voluntary activities [13]. Despite only 2% of members reported being employed, most members (209/625) felt they had enough money to meet their needs (Table 4.8). In addition, some service centres provided opportunities for members to engage in formal work to generate income by attracting a monthly salary (e.g. chefs and managers). However, more research is needed to confirm whether the number of older persons being employed at service centres is significant, since most of the support staff at service centres were volunteers. According to the framework, concentrating only on work in the formal labour market tends to ignore the valuable contribution that older persons make in work in the informal sector and unpaid work in the home [13]. Volunteering opportunities allow older persons to harness their strengths towards tasks they see as meaningful, enabling them to feel engaged and helpful [35]. Voluntary work also benefits older people by increasing social contacts and psychological well-being, while making significant contributions to their communities [13].

According to the framework, development projects (such as what is offered at service centres), need to ensure that older people are eligible for full participation in income generating opportunities [13]. Income generated from fundraising activities supported the programmes at service centres. However, it was not clear if a portion of this income was allocated to members for their personal needs. Nonetheless, since older persons often take prime responsibility for managing their households [13], service centres need to make provision for structured services that support income generation for its members.

In summary, the economic environment has a significant effect on active aging. It is thus important for service centres to provide programmes to address the security of members income, hence aiding the reduction of poverty among older persons. Furthermore, service centres must recognise and enable the active participation of members in economic development activities, formal and informal work, as well as voluntary activities as this will help ensure independence and an increased sense of value.

5.3 Factors affecting implementation of the policy framework

From available data, some factors were identified that impacted on the implementation of the policy framework.

5.3.1 Financing programmes at service centres

Data collected indicated that funding played a pivotal role in the provision of services at service centres (Table 4.1). Financial support for service centres in the Western Cape came from multiple sources and varied among centres with a large percentage of support coming from government and members themselves. This practice was similar to senior clubs in the United States that collected membership fees to support their operations; however, the source was not specified [37]. There was also no clarity in the findings of this study as to the source of income received from members (i.e. whether they were voluntary donations or membership fees) as this was not asked. Similar to a study conducted in the United States that indicated limited data on how reliant service centres are on public funding, managers of Western Cape service centres were also faced with several critical challenges to the continued health and viability of their organisations due to funding challenges and decreased financial support from government [34]. In South Africa, the criteria considered for funding service centres are not clear. However, the WC DSD does provide a different amount of funding to each service centre [68]. Similarly, to what was reported in the United States, managers of Western Cape service centres reported that many centres had been forced to stop providing many of the services they used to provide to members due to lack of funding, and subsequently have seen a considerable drop in attendance [68]. Furthermore, although most of service centres indicated they had annual budgets, some managers, for various reasons, were unable to provide an estimation of the budget allocated to individual service centres. Knowledge of the financial management and funding of service centres is therefore important for understanding the circumstances under which the centres operate. It was evident that some managers did not have a clear understanding of the logistics of funding, suggesting that training of managers in this area is needed. This was similar to what was found in a study by the WC DSD, which reported that centres had a lack of understanding of the criteria contained in the transfer payment agreements, and there were misunderstandings between management and members regarding the allocation of funding from the WC DSD [8]. However, in addition to subsidy received from the WC DSD, most service centres in Western Cape supplemented their budgets through fundraising activities and private donations [68]. However, it is suggested by the researcher that service centres should explore additional avenues of income and funding to sustain service delivery. In addition, since the findings

indicated that most of support came from volunteers, it would be useful if reimbursement incentives are introduced to attract more staff to support service programmes.

5.3.2 Managing service centres

Service centres were affiliated to the DSD, reported an involved community and had varied management and staffing structures. Most of support came from volunteers (Table 4.1). According to Rosenberg (2013), this type of structure can pose many challenges as volunteers have their own views on how an organisation should be run. They may see themselves as decision makers, thus their discourse may animate their work [92]. Leadership could thus have had an impact on the services provided. Only 31% of managers indicated they had previous experience in managing facilities like those of service centres. According to Pardasani and Sackman (2014), low levels of education and literacy also affect leadership abilities [45]. Given South Africa's historical context and the lack of basic educational opportunities and resources current older generations were previously exposed to, managers may not be adequately skilled and prepared to manage service centres. The results of this study found that the average age of managers was 63 years and their educational qualifications were varied, with less than 50% having received a tertiary education (Table 4.6). This differed from studies conducted in high income countries which reported a substantial growth in the educational level of its administrators [45]. Despite this, lack of funding also had implications for retainment and employment of skilled managers for leadership roles at service centres since they may not be adequately compensated [45]. Thus, given the valuable role that staff at service centres play in facilitating relationships of members [143], it is anticipated that challenges related to the training of managers need to be addressed in future research. The findings of this study indicated that more than three quarters of managers at service centres received some form of training (Table 4.6). However, managers identified the need for additional support and training for themselves to address the needs of members, and to offer services that meet the AAPF requirements. These areas of training included computer literacy skills, fundraising skills, networking and collaboration with communities, education on how to train carers and volunteers, health care of older persons, development of service measuring instruments, as well as ABET. The managers perceived the needs of the members would relate to health care, social support, inactivity, isolation, and safety among others. Furthermore, the findings also showed little similarity between centres. There appeared to be no uniformity in

services provided at centres, possibly because services at a centre were informed by the availability of resources or the interests of managers. It is therefore necessary that the WCDS utilise the WHO AAPF in planning services at service centres.

5.4 The role of physiotherapy in facilitating active ageing at service centres

Although the WCPT position statement states that physiotherapists may work in a variety of settings, including service centres [39], the findings of this study could not confirm if physiotherapists provided programmes at service centres in the Western Cape. Nonetheless, should they provide programmes at service centres; physiotherapists remain well positioned to promote the health and wellness of members and support the realisation of their identified aspirations for the future by addressing five important physical behaviours into their treatment programmes. These include physical activity prescriptions, nutrition and weight management, smoking cessation, sleep and stress management [120]. Physiotherapy also improves mental health through exercise by reducing anxiety, depression, and negative mood and by improving self-esteem and cognitive function [177].

Implementing community-based health promotion programmes becomes increasingly important in enabling health care professionals, such as physiotherapists, to improve the quality of life for the older persons [178]. Physical activity appears to be the most important and effective intervention physiotherapists can incorporate into every persons' plan of care to promote health and wellness [120]. Physical activity refers to any activity that has an energy cost, such as housework, shopping, gardening or structured exercise programmes (such as Tai Chi or aqua-aerobics) [179]. Since members indicated engagement in many of these activities within their daily lives, an evidence-based approach to improving members' physical activity levels needs to be followed. Physiotherapists need to educate members about the health benefits of physical activity, create an awareness among members regarding the recommended minimum guidelines for physical activity, explore perceived barriers to physical activity, promote self-efficacy for exercise, encourage goal setting and monitoring of outcomes, build social support and include strategies to prevent relapse [120].

Physiotherapy services also needs to be accessible to members who do not have direct access to conventional programmes at service centres. Physiotherapists can therefore conduct home

visits and implement programmes directed at promotion, prevention, treatment intervention and rehabilitation [39].

5.5 Limitations to study

According to Portney and Watkins (2009), convenience sampling, as was used in phase 2 of the study, can become problematic if the study period is too short and a sufficient number of subjects cannot be obtained [123]. Two main limitations are highlighted in the study, relating to the study design and the sample size.

A cross-sectional quantitative research design was utilised for this two-phased study, which explored the profiles of the service centres for older persons in the Western Cape, as well as the profile of the members. Standardised instruments and self-developed questionnaires were administered. Some open-ended questions were included in these instruments, which generated qualitative responses. Hicks (2009) reports that asking open-ended questions has value and allows for the holistic understanding of members' perception within their social setting [180]. As the research design for the larger study was not qualitative, the responses generated were not explored further by the researchers to determine, for example, the motives and values of the participants in setting their aspirations. A qualitative research design should be utilised in exploring the qualitative responses in depth.

The number of older persons who participated in this study is not representative of older persons in the province. The participants (n=625) formed a very small proportion of older persons in the province – 4.1% of the registered members of the service centres, and 0.12% of older persons in the population in 2011. The number of senior centre members who attended on any given day was also unpredictable, thus full attendance of membership could not be guaranteed on days of data collection, due to the older participants facing many challenges in their communities, for example, lack of transport, ill health, lack of income and lack of interest in programmes offered, as found in a study conducted by Pardasani (2010) [99]. In addition, some service centres had fewer members. These factors also possibly affected the sample representation of members in this study. The data generated cannot therefore be generalised to the population of older persons in the Western Cape Province.

Given the global ageing trend and the challenges facing older persons in communities, this study did not determine the long-term sustainability of service centres or the quality of programmes being offered. However, despite the limited knowledge that this study provides on service centres in the Western Cape, it provides a basis for further research to determine the amount of variability that may exist in other provinces in South Africa.

CHAPTER 6 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The aims of this two-phased study were to explore the characteristics of Service Centres for Older Persons in the Western Cape Province and the profile of the members of these centres. Table 6.1 provides a summary of the evaluation of the WHO Active Ageing Policy Framework in the selected Service Centres for Older Persons in the Western Cape. Given the scarcity of evidence on how the framework has been applied in South Africa, this study explores how service centres in the Western Cape are aligned with the WHO framework on Active Ageing and whether they provide services that cater for the needs of their members. The findings revealed that programmes at service centres, although varied, were unequally represented within the six determinants and were deficient at most service centres (Table 6.1).

Table 6.1: Summary of determinants of active ageing and programmes provided at service centres

Determinants	Items	Availability		Descriptor
		Yes	No	
Health and social care systems	Health promotion & disease prevention	✓		Screening mostly for BP and glucose testing despite members' multimorbidity. No primary and secondary prevention strategies
	Curative services		✓	Members only referred to secondary and tertiary levels of care #
	Long term care	✓		Volunteers doing home visits offered education programmes
	Mental health services		✓	Some centres only provided religious activities #
Behaviour	Physical activity	✓		Variety of physical activities offered by centres

Determinants	Items	Availability		Descriptor
		Yes	No	
	Healthy eating		✓	Meals provided at some centres; nutritional value unclear
	Oral health		✓	No services provided
	Alcohol		✓	No services provided
	Medications	✓		Education on safety of medication
	Iatrogenesis		✓	No services provided
	Adherence		✓	No services provided
Personal	Biology & genetics		✓	No services address members risks
	Psychological services	✓		Arts and crafts design activities offered to enhance members' cognition
Physical environment	Physical environment	✓		Transport provided to access services
	Safe housing	✓		Unclear if information on housing addressed safety of neighbourhoods
	Falls	✓		Falls risk screening offered at five centres. No guidelines on falls prevention provided
	Clean water, clean air & safe foods		✓	No services addressed characteristics of environment impacting chronic illness
Social environment	Social support	✓		Social support addressed at all centres
	Violence & abuse		✓	No services provided
	Education & Literacy	✓		Education and literacy for members provided through Adult Basic Education Training and library services #
Economic	Income	✓		Arts and crafts sale provided income for the centre
	Social protection		✓	No services provided on safety of pensions
	Work	✓		Formal work and volunteering offered

Information obtained from qualitative questions

Health and social services provided by service centres are only partially effective in meeting the needs of members. Screening programmes need to be more comprehensive and holistic while the provision and accessibility of medication for members need consideration. To provide health and social services to members who are unable to care for themselves, it is imperative to provide training, support and remuneration to their caregivers. Service centres

were limited in providing education programmes to reduce members' risk factors associated with chronic diseases of lifestyle and the use of medication. Physical activity programmes were provided, although lack of infrastructure and resources in addition to availability of staff resulted in limitations to the variability of activities within these programmes. A more balanced perspective is needed to include programmes on healthy eating, oral health, and alcohol and tobacco use.

In this study, Members reported positive self-perception and attitudes to life with no difficulty in community engagement. Most members also reported self-satisfaction with their health and quality of life, and despite living in poverty, portrayed later life as a period in which they wanted to continue living engaged lives. Many members expressed self-determined aspirations with possible future-orientated behaviour that could contribute to them shaping their own futures. In terms of physical environment in which members live, service centres only provided members with access to transport, information on housing and fall risk screening. The safety of neighbourhoods, guidelines for falls prevention and aspects relating to the characteristics of the environment (such as clean water, clean air, safe foods) were not addressed. It is therefore important for service centres, in partnership with communities and other service providers, to consider the impact of physical environment on members' health.

All service centres provided adequate social support programmes. However, training of members and communities to address the rights of older persons, especially relating to the challenges of violence and abuse, needs consideration. Furthermore, despite some service centres providing ABET to members, they need to be further empowered to make decisions about their health through improved access to health information. In addition, most members were in receipt of a national old age pension and participated in employment and volunteering opportunities at service centres. However, services relating to the accessibility and security of income were limited, highlighting the need to explore training and mentorship opportunities to support the capacity-building of members, staff and caregivers through collaboration with other organisations.

Service centre managers thus need to acknowledge the diverse role of culture and the values of older persons in Western Cape to better respond to the diversity of needs and interests that exists across their membership. Managers responsible for providing these programmes

tended to be women with limited skills and who needed more education and training to manage the centres appropriately. The members of service centres who benefit from these programmes, despite presenting with health challenges and multi-morbidities, indicated aspirations for the future. Since the goal of the NPD is to increase life expectancy of older persons to 70 years by 2030, a more comprehensive exploration of the profile of older persons will assist the service centre managers to respond to the diversity of needs and interests of members. In addition, programmes need to be innovative and the challenges experienced by service centres, such as financial support/budgets, resources, staffing and training opportunities must be addressed. To do so, service centres need to enhance their service paradigm to offer programmes in collaboration with a wide variety of community partners, including physiotherapists. Physiotherapists have a crucial role to play in raising awareness of the importance of members playing an active role in their decisions about their health and health care, thus responding to the diversity of needs and interests exists across individuals who attend these centres.

6.2 Recommendations

To respond to the WHO recommendations on the applicability of the framework to South Africa, and in view of the goal of the NDP (2013) to increase life expectancy, it has become necessary to extend the scope of this study to other provinces in the country. Recommendations arising from findings of this study are divided into clinical recommendations and research recommendations.

6.2.1 Clinical recommendations

1. The determinants of active ageing, as suggested by the AAPF, can be used to explore if and how far service centres are already working on the realisation of active ageing within future programmes. To achieve this, research is necessary to address challenges faced by service centres and investigate the impact that financial support / budgets, resources and staffing have on the facilitation of positive outcomes for individual members within service centre programmes.

2. Since building infrastructure and appearances impacts on members' wellbeing [22], it is recommended that service centres are upgraded and renovated to provide more modern facilities.
3. Managers are responsible for providing programmes at service centres. Similar to what was found in other studies [93], it is recommended that service centre managers become more aware of the changing demographics of older populations so as to respond to the growing health care needs of members. The next generation of members will have a different way of life and will be IT literate. Service centres will therefore need to provide services to cater for the future generation of older persons who are educated and have skills.
4. To ensure the efficient management of service centres, the education and training of managers needs to be addressed. Partnering with academic institutions (e.g. colleges and universities) therefore becomes essential to provide training workshops and community-based support to educate management, staff, activity and recreational professionals, as well as publicise the existence and benefits of service centres. Higher education institutions could possibly also subsidise the implementation of mentoring programmes with incentives for experienced or retired managers working with new leaders.
5. Service centres provide excellent venues for professionals, such as physiotherapists, to introduce their knowledge and skills to members as they bring a valuable perspective to the ageing network. Given the changing and growing needs of members in the future, there will be an increasing demand for multidisciplinary programmes that combine the expertise of professionals to address these needs.

6.2.2 Research recommendations

1. If the goal of the framework is for older persons to live longer and healthier into their old age, it becomes important to have ongoing research to increase knowledge and understand the needs of members of service centres, as well as acknowledge their goals and aspirations for the future. This will allow service centres to be innovative in their future programming to ensure service programmes are relevant. Research should include the use of larger sample sizes in other parts of the country.

2. Higher education/research institutions need to play a key role in sensitising governments through research on ageing issues and facilitate the choice of topics on ageing for physiotherapy undergraduate projects and post graduate dissertations, as well as develop core competencies within the physiotherapy curriculum that are appropriate for the diverse aging population in South Africa. This could be further supported by the already established Interdisciplinary Institute of Ageing in Africa based at the University of Cape Town in the Western Cape.

References

1. Premiers Office: **Golden Games**. 2018.
2. World Health Organization: **Definition of an older or elderly person**. In. Edited by systems Hsai; 2014/04.
3. Statistics South Africa: **Census 2011: Profile of older persons in South Africa**. In. Edited by Africa SS. Pretoria; 2014.
4. Google scholar: **Service centre**. In.; 2018.
5. Statistics South Africa: **Mid-year population estimates, statistical release**. In. Pretoria; 2017.
6. Beard J, Biggs S, Bloom D, Fried L, Hogan P, Kalache A, Olshansky J: **Global Population Ageing: Peril or Promise? Working Paper Series**. In.: Program on the Global Demography of Aging; 2012.
7. Goodrick W, Pelser A: **The greying of a rainbow nation: Policy responses to the implications of population ageing in South Africa**. *Suppl on Population Issues in South Africa* 2014, **28**(1):648-660.
8. Western Cape Department of Social Development: **An Evaluation of Service Centres for Older Persons in the Western Cape**. In. Edited by Research Population and Knowledge Management WCG; 2015.
9. DSD W: **Annual Performance Plan**. In. Edited by Development WCPGDoS; 2014/15.
10. Makiwane M, Ndinda C, Botsis H: **Gender, race and ageing in South Africa**. *Agenda* 2012, **26**(4):15-28.
11. Department of Health: **National Development Plan 2030**. In. Edited by Health Do. Republic of South Africa; 2013: 330-351.
12. Department of Health: **Strategic Plan**. In. Edited by Health Do. Republic of South Africa; 2014/15 - 2018/19.
13. World Health Organization: **Active Ageing- A policy Framework**. In.; 2002.
14. Mapoma C: **Determinants of active ageing in Zambia**. *African Population Studies* 2014, **28**(3):1286-1296.
15. African Union: **AU Policy Framework and Plan of Action on Ageing**. In. Addis Ababa: African Union; 2003.
16. Mathiso S: **Realising the rights of older persons in South Africa: conference paper**. In., vol. 12: ESR Review; 2011: 3-4.
17. He W, Muenchrath M, Kowal P: **Shades of Gray: A Cross-Country Study of Health and Well-Being of the Older Populations in SAGE Countries, 2007–2010**. In. Washington, DC: U.S. Government Printing Office; 2012.

18. Gomez-Olive F, Thorogood M, Clark B, Khan K, Tollman S: **Assessing health and well-being among older people in rural South Africa.** *Global Health Action* 2010, **3**:23-35.
19. Phaswana-Mafuya N, Peltzer K, Chirinda W, Kose Z, Hoosain E, Ramlagan S, Tabane C, Davids A: **Self- rated health and associated factors among older South Africans: evidence from the study on global aging and adult health** *Global Health Action* 2013, **6**:19880.
20. Tomita A, Burns J: **Depression, disability and functional status among community dwelling older adults in South Africa: evidence from the first South African National Income Dynamics Study.** *International Journal of Geriatric Psychiatry* 2013, **28**:1270-1279.
21. Kalula S, Scott V, Dowd A, Brodrick K: **Falls and fall prevention programmes in developing countries: Environmental scan for the adaptation of the Canadian Falls prevention curriculum for developing countries.** *Journal of Safety Research* 2011, **42**(6):461-472.
22. Mayosi B, Flisher A, Lalloo U, Sitas F, Tollman S, Bradshaw D: **The burden of non-communicable diseases in South Africa.** *Lancet* 2009, **374**:934-947.
23. Westaway M: **The impact of chronic diseases on the health and well-being of South Africans in early and later age.** *Achieves of Gerontology and Geriatrics* 2010, **50**:213-221.
24. Aboderin I: **Understanding and Advancing the Health of Older Populations in sub-Saharan Africa: Policy perspectives and evidence needs.** *Public Health Reviews* 2010, **32**(2):357-376.
25. Rosenbaum M, Sweeney J, Massiah C: **The restorative potential of senior centers.** *Managing Service Quality* 2014, **24**(4).
26. Ramklass S, Butua A, Ntinga N, Cele N: **Caring for an ageing population: Are physiotherapy graduates adequately prepared?** *Educational Gerontology* 2010, **36**(10-11):940-995.
27. Drewnowski A, Monsen E, Birkett D, Gunther S, Vendeland S, Jeff S, Marshall G: **Health Screening and Health Promotion Programs for the Elderly.** *Dis Manage Health Outcomes* 2003, **11**(5):299-309.
28. Pardasani M, Goldkind L: **Senior Centers and Policy Advocacy: Changing Public Perceptions.** *Educational Gerontology* 2012, **38**:375-390.
29. Mestheneos E, Withnall A: **Ageing, learning and health: making connections.** *International Journal of Lifelong Education* 2016.
30. Wick J: **Senior centers: Traditional and evolving roles.** *The Consultant Pharmacist* 2012, **27**(9):664-667.
31. Manthorpe M, Moriarty J: **Examining day centre provision for older people in the UK using the Equality Act 2010: findings of a scoping review.** *Health and Social Care in the Community* 2013, **22**(4):352-360.

32. Rosenberg B: **Social spaces for seniors: Exploring senior's centers and clubs in Australia.** *Journal of Sociology* 2013, **0**(0):1-14.
33. Taylor-Harris D, Khan H: **The Third-Age African American Seniors: Benefits of Participating in Senior Multipurpose Facilities.** *Journal of Gerontological Social Work* 2011, **54**:351-371.
34. Markwood S: **Is Senior Center here to stay?** . *Journal of American Society on Aging* 2013, **37**(4):75-76.
35. Pettigrew K: **Senior Community Centers of San Diego as a preventative care model.** *American Journal of Preventative Medicine* 2013, **44**(ISI):S34-S38.
36. Tobias K, Lama S, Parker S, Henderson C, Nickerson A, Reid M: **Meeting the public health challenge of pain in later life: What role can Senior Centers play?** *Pain Management Nursing* 2013, **15**(4):760-767.
37. Pardasani M, Sackman B: **New York City Senior Centers: A unique, grassroots, collaborative advocacy effort.** *Activities, Adaptation & Aging* 2014, **38**(3):200-2019.
38. Pardasani M, Thompson P: **Senior Centers: Innovative and emerging models.** *Journal of Applied Gerontology* 2010, **31**(1):52-77.
39. World Confederation for Physical Therapy: **Policy statement: Physical Therapy services for older people.** In. Edited by Therapy WCfP; 2017.
40. Pardasani M: **Senior Centers.** *Activities, Adaptation & Aging* 2008, **28**(4):27-44.
41. Department of Social Development: **Final Report: Audit of Residential Facilities.** In.; 2010.
42. Van Malderen L, Mets T, De Vriendt P, Gorus E: **The Active Ageing –concept translated to the residential long-term care.** *Qual Life Res* 2013, **22**:929-937.
43. Chansarn S: **Active Ageing of elderly people and its determinants: Empirical evidence from Thailand.** *Asia-Pacific Social Science Review* 2012, **12**(1):1-18.
44. Arifin E, Braun K, Hogervorst E: **Three Pillars of Active Ageing in Indonesia.** *Asian Population Studies* 2012, **8**(2):208-230.
45. Bowling A: **Lay perceptions of successful ageing: findings from a national survey of middle aged and older adults in Britain.** *European Journal of Ageing* 2006, **4**(1):57-58.
46. Paul C, Fonseca A, Ribeiro O: **"The protocol of assessment of active ageing (P3A)".** In: *Proceedings of the Annual Conference of the British Society of Gerontology: 2008; Bristol, UK; 2008.*
47. Walker A: **Commentary: The emergence and application of active aging in Europe.** *Journal of Aging and Social Policy* 2009, **21**(1):75-93.
48. Fernandez-Ballesteros R, Garcia L, Abarca D, Blanc E, Efklides A, Moraitou D, Kornfeld R, Lerma A, Mendoza-Numez V, Mendoza-Ruvalcaba N *et al*: **The concept of "ageing well" in ten Latin American and European countries.** *Ageing and Society* 2010, **30**(1):41-56.

49. Komp K, Johansson S: **Population ageing in a lifecourse perspective: developing a conceptual framework.** *Ageing and Society* 2015;1-24.
50. Paul C, Ribeiro O, Teixeira L: **Active Ageing: An Empirical approach to the WHO Model.** *Current Gerontology and Geriatrics Research* 2012;1-10.
51. Belanger E, Ahmed T, Filiatrault J, Yu H, Zunzunegui M: **An empirical comparison of different models of active aging in Canada: The international Mobility in Aging Study.** *The Gerontologist* 2017, **57**(2):197-205.
52. Chaves M, Camozzato A, Eizirik C, Jeffrey K: **Predictors of normal and successful aging among urban-dwelling elderly Brazilians.** *Journal of Gerontology Series B: Psychological Sciences & Social Sciences* 2009, **64B**(5):597-602.
53. Cloos P, Allen C, Alvarado B, Zunzunegui M, Simeon D, Eldemire-Shearer D: **Active Ageing: a qualitative study in six Caribbean countries.** *Ageing & Society* 2010, **30**:79-101.
54. Annear M, Keeling S, Wilkinson T, Cushman G, Gidlow B, Hopkins H: **Environmental influences on healthy and active ageing: a systematic review.** *Ageing and Society* 2014, **34**:590.
55. Kostanjsek N: **Use of the International Classification of Functioning, Disability and Health (ICF) as a conceptual framework and common language for disability statistics and health information systems.** *BMC Public Health* 2011, **1**(Suppl 4)(53):1-6.
56. Guptill C: **Musicians' health: Applying the ICF framework in research.** *Disability and Rehabilitation* 2008, **30**(12-13):970-977.
57. Alford V, Remedios L, Webb G, Ewen S: **The use of the international classification of functioning, disability and health (ICF) in indigenous healthcare: a systematic literature review.** *International Journal in Equity and Health* 2013, **12**:32.
58. Atkinson H, Nixon-Cave K: **Case Report: A Tool for Clinical Reasoning and Reflection using the International Classification of Functioning, Disability and Health (ICF) Framework and Patient Management Model.** *Physical Therapy* 2011, **91**(3):416-430.
59. Kirchberger I, Sinnott A, Charlifue S, Kovindha A, Luthi H, Campbell R, Zwecker M, Scheuringer M, Cieza A: **Functioning and disability in spinal cord injury from the consumer perspective: an international qualitative study using focus groups and the ICF.** *Spinal Cord* 2010, **48**:603-613.
60. Arnadottir S, Gunnarsdottir E, Stenlund H, Lundin-Olsson L: **Determinants of self-rated health in old age: A population based, cross sectional study using the International Classification of Functioning.** *BMC Public Health* 2011, **11**:670.
61. Resnik L, Allen S: **Using International Classification of Functioning, Disability and Health to understand challenges in community reintegration of injured veterans.** *Journal of Rehabilitation Research & Development* 2007, **44**(7).
62. Arnadottir S, Gunnarsdottir E, Stenlund H, Lundin-Olsson L: **Participation frequency and perceived participation restrictions at older age: applying the International**

- Classification of Functioning, Disability and Health (ICF) framework.** *Disability and Rehabilitation* 2011, **33**(23-24):2208-2216.
63. Stucki G, Ewert T, Cieza A: **Value and application of the ICF in rehabilitation medicine.** *Disability and Rehabilitation* 2002, **24**(17):932-938.
 64. Lombard A, Kruger E: **Older Persons: The case of South Africa.** *Ageing International* 2009, **34**(3):119-135.
 65. Sidorenko A, Walker A: **The Madrid International Plan of Action on Ageing: from conception to implementation.** *Ageing and Society* 2004, **24**:147-165.
 66. Afshar S, Roderick P, Kowal P, Dimitrov B, Hill A: **Multimorbidity and the inequalities of global ageing: a cross sectional study of 28 countries using the World Health Surveys.** *BMC Public Health* 2015, **15**:776.
 67. Dotchin C, Akinyemi R, Gray W, Walker R: **Geriatric medicine: services and training in Africa.** *Age and Ageing* 2013, **42**(1):124-128.
 68. Apt N: **Ageing in Africa: Past experiences and strategic directions.** *Ageing International* 2011, **37**:93-103.
 69. Joubert J, Bradshaw D: **Population Ageing and Health Challenges in South Africa**, vol. Chapter 15; 1995-2005.
 70. Joubert J, Bradshaw D: **Health of older persons:** South African Health Review, Durban Health Systems Trust; 2003/2004.
 71. Doh D, Adusei-Asante K: **Active Ageing with the African in mind: An Interpretive Phenomenological Analysis.** In: *39th African Studies Association of Australasia and the Pacific(AFSAAP) 5-7 December 2016; University of Western Australia: Africa: Moving the Boundaries 5-7 December 2016.*
 72. Harper S: **Addressing the implications of global ageing.** *Journal of Population Research* 2006, **23**(2):205-223.
 73. Stenner P, Mc Farquhar T, Bowling A: **Older people and “Active Ageing”: Subjective aspects of ageing actively.** *Journal of Health Psychology* 2010, **16**(3):467-477.
 74. Walker A: **A strategy for active ageing.** *International Social Security Review* 2002, **55**(1):121-139.
 75. Chan A, Liang S: **Active Ageing: Policy Framework and Applications to Promote Older Adult Participation in Hong Kong.** *Ageing International* 2013, **38**:28-42.
 76. Bowling A: **Enhancing later life: How older people perceive active ageing.** *Aging and Mental Health* 2008, **12**(3):293-301.
 77. Minkler M, Holstein M: **From civil rights to civic engagement? Concerns of two older critical gerontologists about a “new social movement” and what it portends.** *Journal of Ageing Studies* 2008, **22**:196-204.

78. Boudiny K: **'Active Ageing': From empty rhetoric to effective policy tool.** *Ageing and Society* 2013, **33**(6):1077-1098.
79. Chan A, Cao T: **Age-friendly neighbourhoods as civic participation: Implementation of an Active Ageing Policy in Hong Kong.** *Journal of Social Work Practice* 2015, **29**(1):56-68.
80. Foster L, Walker A: **Active and successful aging: A European policy perspective** *The Gerontologist* 2014, **55**:83-90.
81. Ben-Shlomo Y, Kuh D: **A lifecourse approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives.** *International Journal of Epidemiology* 2002, **31**:285-293.
82. Dhurup M, Surujlal J, Sooful A: **An exploratory study of elderly leisure engagements among residents in a contiguous milieu within a regional context.** *African Journal for Physical, Health Education, Recreation and Dance* 2009, **15**(4):552-574.
83. Ferreira M: **Research on Ageing in Africa: What do we have, not have and should have?** *Generations Review* 2005b, **15**(2):32-35.
84. Samaad A: **Population Ageing and its Implications for Older Persons "An analysis of the perspectives of Government and Non Government officials within the Department of Social Development sector".** *Masters.* South Africa: University of South Africa; 2012.
85. **A National Health Plan for South Africa** [<http://www.anc.org.za/show.php?id=257>]
86. Government Gazette: **Older Persons Act of 2006.** In., vol. 497. Cape Town 2 November 2006.
87. WOW ! Working Group: **Western Cape on Wellness: Creating a culture of wellness together.** In. Edited by government WC. Cape Town: Western Cape Government: Health; March 2015: 2-3.
88. Low L, Yap M, Brodaty H: **A systematic review of different models of home and community care services for older persons.** *BMC Health Services Research* 2011, **11**:93.
89. Boen H, Dalgard O, Johansen R, Nord E: **Socio-demographic, psychosocial and health characteristics of Norwegian senior centre users: A cross sectional study.** *Scandinavian Journal of Public Health* 2010, **38**:508-517.
90. Turner K: **Senior Citizens Centers: What they offer, who participates, and what they gain.** *Journal of Gerontological Social Work* 2004, **43**(1):37-47.
91. Donald E, Bechill W, Roslyn L, Chester M: **Core Programs and Services at Senior Centers.** *Journal of Gerontological Social Work* 2008, **17**(1/2):145-161.
92. Casteel C, Nocera M, Runyan C: **Health promotion & physical activity programmes in senior centres.** *Activities, Adaptation and Aging* 2013, **37**(3):213-223.
93. Pardasani M, Thompson P: **Senior Centers: Innovative and emerging models.** *Journal of Applied Gerontology* 2012, **31**(1):52-77.

94. Lai D: **Use of Senior Center Services of the Elderly Chinese Immigrants.** *Journal of Gerontological Social Work* 2008, **35**(2):59-79.
95. Fitzpatrick T, McCabe J: **Future challenges for Senior Center programming to serve younger and more active baby boomers.** *Activities, Adaptation & Aging* 2008, **32**(3-4):198-213.
96. MaloneBeach EE, Langeland K: **Boomers' prospective needs for senior centres and related services: A survey of persons 50-59.** *Journal of Gerontological Social Work* 2011, **54**:116-130.
97. Marhankova J: **Women are just more active- gender as a determining factor in involvement in senior centres.** *Ageing and Society* 2014, **34**:1482-1504.
98. Hostetler A: **Senior centers in the era of the "Third Age". Country Clubs, community centers, or something else?** *Journal of Aging Studies* 2010, **25**:166-176.
99. Pardasani M: **Senior Centres: Characteristics of Participants and Nonparticipants.** *Activities, Adaptation & Aging* 2010, **34**:48-70.
100. Gelfand D, Bechill W, Cester R: **Core Programs and Services at Senior Centres.** *Journal of Gerontological Social Work* 2008, **17**(1/2):145-161.
101. Walker A, Bisbee C, Porter R, Flanders J: **Increasing Parctitioners' Knowledge of Participation among elderly adults in senior center activities.** *Educational Gerontology* 2004, **30**:353-366.
102. McRae-Krisa L, Paetsch J: **An examination of Best Practice in multi-service Senior Centres.** In.: Canadian Research Institute for Law and the Family; 2013.
103. Dal Santo T: **Senior Center Literature Review: Reflecting and responding to community needs.** *California Commission on Aging, Archstone Foundation* 2009.
104. Van Rensburg S, Strydom H: **A profile of personnel who work with retired volunteers at a service centre for elderly persons.** *Advances in Aging Research* 2012, **1**(1):1-12.
105. Rill J: **An examination of Senior Center Efficacy: Variation in participation and benefits.** *Electronic Theses, Treatises, and Dissertations.* 2011.
106. Kirk A, Alessi H: **Senior Service Centers: A comparison of affiliated and nonaffiliated participants.** *Journal Fall* 2000, **2**(2):89-100.
107. Sviden G, Tham K, Borell L: **Elderly participants of social and rehabilitative day centres.** *Scandinavian Journal of Caring Sciences* 2004, **18**:402-409.
108. Frosch D, Ricon D, Ochoa S, Mangione C: **Activating Seniors to Improve Chronic Disease Care: Results from a Pilot Intervention Study.** *Journal of American Geriatrics Society* 2010, **58**:1496-1503.
109. Smith S, Soubhi H, Fortin M, O'Dowd T: **Interventions for improving outcomes in patients with multimorbidity in primary care and community settings.** *Cochrane Database of Systematic Reviews* 2012(4).

110. Weil J: **"We're unhappy when we can't get there": Ethnographic work on social support, health, and well-being at a Senior Citizen's Center.** In: *School of Gerontology Program.* University of Northern Colorado; 2008.
111. Hosain G, Begum A: **Health needs and health status of the elderly in rural Bangladesh.** *Asia Pac J Public Health* 2003, **15**(1):3-9.
112. Adeyanju A, Omisakin F, Ojedele E: **Health and Social problems of elderly people in selected areas of Ondo State, Nigeria.** *Indian Journal of Gerontology* 2014, **2**:231-243.
113. Ng N, Hakimi M, Byass P, Wilopo S, Wall S: **Health and quality of life among older rural people in Purworejo District, Indonesia.** *Global Health Action* 2010, **3**:78-87.
114. Marindo R, Groenewald C, Gaisie S: **The State of the Population in the Western Cape Province.** In. Edited by Development DoS: Human Sciences Research Council; 2008.
115. Ferris R, Glicksman A, Kleban M: **Environmental Predictors of Unmet-and Community-Based Service Needs of Older Adults.** *Journal of Applied Gerontology: The Official Journal of the Southern Gerontological Society* 2014.
116. Chen Y, Thompson E: **Understanding factors that influence success of home and community-based services in keeping older adults in community settings.** *Journal of Aging and Health* 2010, **22**(3):267-291.
117. Rowe J, Fried L: **Meeting the health care needs of aging societies.** *Brown Journal of World Affairs* 2013, **xx**(1):57-67.
118. Tuntland H, Aaslund M, Espehaug B, Forland O, Kjeklen I: **Reablement in community-dwelling older adults: a randomised control trial.** *BMC Geriatrics* 2015, **15**(145).
119. Freburger J, Holmes G: **Physical Therapy use by community-based older people.** *Physical Therapy* 2005, **85**(1):19-33.
120. Bezner J: **Promoting Health and Wellness: Implications for Physical Therapist Practice.** *American Physical Therapy Association* 2015, **95**(10):1433-1444.
121. Lam M, Ranchod V: **Labor force withdrawal of the elderly in South Africa.** In. Washington DC: National Research Council; 2006.
122. [<http://www.westerncape.gov.za/directories/facilities/859>]
123. Portney L, Watkins M: **Foundations of Clinical Research, Applications to Practice** 3rd edn: Pearson Education Incorporated; 2009.
124. Lwanga S, Lemeshow S: **Sample size determination in health studies, A practical manual.** *World Health Organisation* 1991(1991):1-3.
125. Nedjat S, Montazeri A, Holakouie K, Majdzadeh R: **Psychometric properties of Iranian interview-administered version of the World Health Organisation's Quality of Life Questionnaire (WHOQOL-BREF): A population based study.** *BMC Health Services Research* 2008, **8**:61.

126. Conn V, Algase D, Rawl S, Zerwic J, Wynman J: **Publishing Pilot Intervention work.** *Western Journal of Nursing Research* 2010, **32**(8):994-1010.
127. [[www.who.int/substance](http://www.who.int/substance_abuse/research_tools/translation/en/) abuse/research tools/translation/en/]
128. Murphy K, Lowe S: **Improving Fall Risk Assessment in Home Care.** *Home Health Nurse* 2013, **31**(7 July/August).
129. Bertera E: **Assessing Perceived Health Promotion Needs and Interests of Low-Income Older Women.** *Journal of Women's Health & Gender-Based Medicine* 1999, **8**(10):1323-1336.
130. Gureje O, Kola L, Alfolabi E, Olley B: **Determinants of quality of life of elderly Nigerians: results from the Ibadan Study of Ageing.** *African Journal of Medical Sciences* 2008, **37**(3):239-247.
131. Hill M, Noonan V, Sakakibara B, Miller W, Team SR: **Quality of life instruments and definitions in individuals with spinal cord injury: a systematic review.** *Spinal Cord* 2010, **48**:438-450.
132. Krageloh C, Kersten P, Billington D, Hsien-Chuan Hsu P, Shepherd D, Landon J, Feng X: **Validation of the WHOQOL-BREF quality of life questionnaire for general use in New Zealand: confirmatory factor analysis and Rasch analysis.** *Qual Life Res* 2013, **22**:1451-1457.
133. World Health Organisation: **WHOQOL: Measuring Quality of Life.** In. Edited by Programme on Mental Health DoMHaPoSA; 1997.
134. Hwang H, Liang W, Chiu, Lin: **Suitability of the WHOQOL-BREF for community dwelling older people in Taiwan.** *Age and Aging* 2003, **32**(6):593-600.
135. Polinder S, Haagsma J, van Klaveren D, Steyerberg E, van Beeck E: **Health-related quality of life after TBI: a systematic review of study design, instruments, measurement properties, and outcome.** *Population Health Metrics* 2015, **13**(4).
136. Saxena S, Carlson D, Billington R, Orley J: **The WHO quality of life assessment instrument (WHOQOL-Bref): The importance of its items for cross-cultural research.** *Quality of Life Research* 2001, **10**:711-721.
137. Lucas-Carrasco R, Laidlaw K, Power M: **Suitability of the WHOQOL-BREF and WHOQOL-OLD for Spanish older adults.** *Aging & Mental Health* 2011, **15**(5):595-560.
138. Skevington S, Lofty M, O'Connell K: **The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL Group.** *Qual Life Res* 2004, **13**:299-310.
139. Federeci S, Meloni F, Presti A: **International Literature Review on the WHODAS II (World Health Organisation Disability Assessment Schedule II.** *Lifespan and Disability* 2009, **XII**(1):83-110.
140. Meesters J, Verhoef J, Liem I, Putter H, Vliet Vlieland T: **Validity and responsiveness of the World Health Organisation Disability Assessment Schedule II to assess disability in rheumatoid arthritis patients.** *Rheumatology* 2010, **49**:326-333.

141. Andrews G, Kemp A, Sunderland M, von Korff M, Ustun T: **Normative Data for the 12 item WHO Disability Assessment Schedule 2.0.** *PLoS ONE* 2009, **4**(12):e8343.
142. **WHODAS II** [<http://www.who.int/classification/icf/whodasII/en>]
143. Bodur S, Cingil D: **Using WHOQOL-BREF to evaluate quality of life among Turkish elders in different residential environments.** *Journal of Nutrition, Health & Aging* 2009, **13**(7):652.
144. Chow H: **Health Care Service Needs and Correlates of Quality of Life: A case study of elderly Chinese immigrants in Canada.** *Soc Indic Res* 2012, **106**:347-358.
145. Dattilo J, Lorek A, Mogle J, Sliwinski M, Freed S, Frysinger M, Schuckers S: **Perceptions of Leisure by Older Adults who attend senior centers.** *Leisure Sciences* 2015, **37**:373-390.
146. Hakkinen A, Arkela-Kautiainen M, Sokka T, Hannonen P, Kautiainen H: **Self-report functioning according to the ICF model in elderly patients with rheumatoid arthritis and in population controls using the multidimensional health assessment questionnaire.** *Journal of Rheumatology* 2009, **36**(2):246-253.
147. World Health Organization: **How to use the ICF: A Practical Manual for using the International Classification of Functioning, Disability and Health (ICF).** In. Geneva, Switzerland: World Health Organization; 2013.
148. World Health Organization: **ICF: International Classification of Functioning, Disability and Health.** In. Geneva, Switzerland: World health Organization; 2001.
149. Arvidsson P, Granlund M, Thyberg M: **How are the activity and participation aspects of the ICF used? Examples from studies of people with intellectual disability.** *NeuroRehabilitation* 2015, **36**:45-49.
150. Allan C, Campbell W, Guptill C, Stephenson F, Campbell K: **A conceptual model for interprofessional education: The International Classification of Functioning, Disability and Health (ICF).** *Journal of Interprofessional Care* 2006, **20**(3):235-245.
151. World Medical Association: **World Medical Association Declaration of Helsinki- Ethical Principles for Medical Research involving human subjects** In.; 2013.
152. South African Law Reform Commission: **Privacy and Data Protection, Discussion Paper, Project 124.** In.: ISBN 0-621-36326-X; October 2005.
153. **Rural Areas Act** [<https://www.westerncape.gov.za/general-publication/information-rural-areas-act>]
154. **Services for Senior Citizens** [<https://www.westerncape.gov.za/news/services-senior-citizens>]
155. Holm A, Severinsson E: **A qualitative systematic review of older persons' perceptions of health, ill health, and their community health care needs.** *Nursing Research and Practice* 2013.

156. Clarke A, Warren L: **Hopes, fears and expectations about the future: what do older person's stories tell us about active ageing?** *Ageing and Society* 2007, **27**(4):465-488.
157. **National Development Plan** In.; 2013.
158. Beswick A, Rees K, Diepe P, Ayis S, Gooberman-Hill R, Horwood J, Ebrahim S: **Complex interventions to improve physical function and maintain independent living in elderly people: a systematic review and meta-analysis.** *Lancet* 2008, **371**:725-735.
159. Hickerson B, Moore A, Oakleaf L, Edwards M, James P, Swanson J, Henderson K: **The role of a senior center in promoting physical activity for older adults.** *Journal of Park and Recreation Administration* 2008, **26**:22-39.
160. Flisher A, Gevers A: **Mental Health and risk behaviour.** In: *Healthy Children*. vol. Part 2: University of Cape Town: 53-57.
161. Matsui M, Capezuti E: **Perceived Autonomy and Self-Care Resources among Senior Center Users.** *Geriatric Nursing* 2008, **29**(2):141-147.
162. Boyle P, Barnes L, Buchman A, Bennett D: **Purpose in life is associated with mortality among community-dwelling older persons.** *Journal of Psychosomatic Medicine* 2009, **71**(5):574-579.
163. Boyle P, Buchman A, Bennett D: **Purpose in life is associated with a reduced risk of incident disability among community-dwelling older persons.** *American Journal of Geriatric Psychiatry* 2010, **18**(12):1093-1102.
164. Krause N, Hayward R: **Religion, meaning in life, and change in physical functioning during late adulthood.** *Journal of Adult Development* 2012, **19**:158-169.
165. Steger M, Oishi S, Kashdan T: **Meaning in life across the lifespan: Levels and correlates of meaning of life from emerging adulthood to older adulthood** *Journal of Positive Psychology* 2009, **4**(1):43-52.
166. Wong G: **Quality of life of the elderly in Singapore's multi-racial society.** *International Journal of Social Economics* 2003, **30**(3):302-319.
167. Hooker S, Masters K: **Purpose in life is associated with physical activity measured by accelerometer.** *Journal of Health Psychology* 2016, **21**(6):962-971.
168. Amosun S, Harris F: **"what next now that you are sixty?"- Preliminary exploration of the self-reported aspirations of community dwelling older persons in the Western Cape Province, South Africa within the active aging framework.** *Physiotherapy Theory and Practice* 2018.
169. Statistics South Africa: **New mid-year estimates reveal ageing population.** In.; 2017.
170. **Crime Stats** [<https://www.crimestatssa.com>]
171. Pollack H: **Reaching empowered aging through reducing health and financial disparities.** *Journal of American Society on Aging* 2015, **39**(1):92-96.

172. Lin M, Wolf S, Hwang H, Gong S, Chen C: **A randomised control trial of fall prevention programs and quality of life in older fallers.** *The American Geriatric Society* 2007, **55**(4):499-506.
173. Annear M, Keeling S, Wilkinson T, Cushman G, Gidlow B, Hopkins H: **Environmental influences on healthy and active ageing: a systematic review.** *Ageing & Society* 2014, **34**:590-622.
174. Bohman D, van Wyk N, Ekman S: **South Africans' experiences of being old and of care and caring in a transitional period.** *International Journal of Older People Nursing* 2010:187-195.
175. Stilwell D: **Health Literacy and Numeracy: The overlooked challenge for elders who want to guide their own healthcare.** *Journal of the American Society on Aging* 2015, **39**(1):88-91.
176. Barrientos A: **What is the impact of non-contributory pensions on poverty? Estimates from Brazil and South Africa.** *Chronic Poverty Research Centre* 2003.
177. Kaur J, Masaum M, Bhatia M: **Role of Physiotherapy in Mental Health Disorders.** *Delhi Psychiatry Journal* 2013, **16**(2):400-408.
178. Shellman J: **Promoting elder wellness through a community-based blood pressure clinic.** *Public Health Nursing* 2000, **17**(4):257-263.
179. Taylor D: **Physical activity is medicine for older adults.** *Postgrad Med Journal* 2014, **90**:26-32.
180. Hicks C: **Research Methods for Clinical Therapists, Applied Project Design and Analysis,** 5th edition edn: Elsevier Limited; 2009.

Appendices

Appendix 1: Ethics Approval Letters



UNIVERSITY OF CAPE TOWN
Faculty of Health Sciences
Human Research Ethics Committee



Room E52-24 Old Main Building
Groote Schuur Hospital
Observatory 7925
Telephone [021] 404 7682 • Facsimile [021] 406 6411
Email: posi.team@uct.ac.za
Website: www.health.uct.ac.za/research/humanethics/forms

08 September 2014

HREC REF: 663/2014

Prof SL Amosun
Health & Rehab Sciences
F45, Old Main Building

Dear Prof Amosun

PROJECT TITLE: AN EXPLORATION OF SERVICES AND MEMBER PROFILES AT SENIOR SERVICE CENTRES IN THE WESTERN CAPE, SOUTH AFRICA. (Sub study linked to 315/2014)
MSc candidate Fahmida Harris.

Thank you for submitting your study to the Faculty of Health Sciences Human Research Ethics Committee for review.

It is a pleasure to inform you that the HREC has **formally approved** the above-mentioned study.

Approval is granted for one year until the 30th September 2015.

Please submit a progress form, using the standardised Annual Report Form if the study continues beyond the approval period. Please submit a Standard Closure form if the study is completed within the approval period.

(Forms can be found on our website: www.health.uct.ac.za/research/humanethics/forms)

We also acknowledge the MSc student, Fahmida Harris is also involved in this study.

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote the HREC reference no in all your correspondence.

Yours sincerely

pp

T. Burges

PROFESSOR M BLOCKMAN
CHAIRPERSON, FHS HUMAN ETHICS

Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Human Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP) and Declaration of Helsinki guidelines. The Human Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

Reference: 12/1/2/4

Enquiries: Ms Petro Brink/Clinton Daniels

Tel: 021 4834512

Ms F. Harris
20 Bellmore Avenue
Penlyn Estate
Landsdowne
Athlone
Cape Town

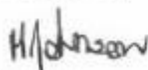
Dear Ms Harris

*

RESEARCH ETHICS COMMITTEE: REASONS FOR DECISION

1. Your request of 27 October 2014 for written reasons for the decision of the Research Ethics Committee (REC) of 21 October 2014, refers.
2. As indicated in a meeting with the REC Secretariat on 27 October 2014, the Department does not have the legal authority to approve research applications in respect of service centres, as these entities are legally autonomous and should independently consent to participation in research.
3. This decision therefore does not imply that the Department regards your intended research as unethical.

Yours sincerely



Ms M. Johnson

Chairperson: Research Ethics Committee

Date: 19/11/14

Appendix 2: Letter to National Department of Social Development

NPO
Directorate
National Department of Social Development
Private Bag X901
Pretoria
0001

Date: _____

Dear _____

RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT SERVICE CENTRES IN THE WESTERN CAPE

I am a qualified physiotherapist employed at the University of Cape Town as a clinical educator working in the area of geriatrics. I am currently registered for MSc Physiotherapy by dissertation and the title of my thesis is: **‘An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa’**. Please see information below pertaining to the intended study for your perusal.

Background

The generation of older persons (elderly) is rapidly increasing with African countries experiencing the fastest growing population in the world. South Africa has the continents highest percentage of older persons, with the Western Cape making up 8.7% of the total national population. Ageing of populations is unfolding amidst widespread economic strain where the elderly face many challenges and are vulnerable to poor health outcomes (including ill health and disability relating to chronic non-communicable diseases like hypertension, diabetes, high cholesterol, obesity, tobacco and alcohol abuse), poor social support, altered family structures, poverty, abuse, the impact of HIV/AIDS and poor living conditions. These problems are worsened by a lack of infrastructure and services within the community and eventually contribute significantly to their loneliness and isolation.

Globally, governments are becoming increasingly sensitive to the consequences of ageing and are more aware that the average life expectancy of its citizens will continue to increase. Thus, in order to ensure that older persons enjoy good quality of life and age successfully, global

policies on ageing recommend that services and programmes directed at the elderly should focus on improving psychosocial well-being, quality of life and independence.

It is also suggested that health promotion strategies should facilitate the prevention of disease and disability in the elderly, while ensuring the enablement of physical and social environments. Thus, in order to understand the health, welfare and social support needs of the elderly, their health status, functioning and quality of life needs to be measured.

Service centres support successful ageing by providing a wide range of opportunities for health, social, recreational and educational services for the elderly, as well as volunteer development advocacy and outreach. Attendance at these centres have also been found to improve psychological wellbeing, satisfy social needs, improve friendships and stress levels, as well as contribute to a positive perception of general health and wellbeing.

Service centres were developed internationally but have now become increasingly popular in South Africa. Previous correspondences with your department indicated that there is an incomplete national data base on service centres and programmes implemented at these centres. However, in the Western Cape there are 200 registered service centres distributed across various districts and municipalities. Although these service centres cater for a variation in the population it serves, there is very little information available on needs-based service provision. In addition, organisational structures, designs and services, as well as voluntary membership vary in characteristics at these services and therefore it is unclear what the possible links are between characteristics of members and services provided. Details on how these service centres are managed, as well as their programme delivery are also unclear.

Purpose of the study

The purpose of this study is to explore the characteristics of service centres for older persons and the services provided at these facilities. This includes determining its organisational structures, the managers' profile, their perception of the needs of elderly members at the centre and types of services offered. In addition, this study also aims to gain an understanding of the older persons' (members) health and well-being, their health care needs and demand for services, as well as determine if programmes offered are relevant and cater for their needs. Exploration of the social demographic profile of members at the service centres will provide

information pertaining to the economic background and psychosocial characteristics that could impact health care needs.

Procedure for the study

Participants (managers and members of service centres) will be recruited from the provincial database of 200 service centres within the five districts and Cape Metropole in the Western Cape. However, due to time constraints and limited resources, only a selected sample of service centres will be included in this study (see attached list). Participants (managers and members of service centres) will be interviewed by the researcher or trained fieldworkers in their preferred language and assisted to complete a questionnaire. These fieldworkers would receive procedural training, will be required to provide their written informed consent to assist with the study and also be requested to complete and sign a confidentiality agreement as a method to protect the rights of those who participate in the study. Individual consent will be obtained from each participant and confidentiality assured at all times.

Once permission is obtained from your office to proceed with this study, it is my intention to notify the district office of the intended study and recruit support from individual managers and members of the selected centres. Data will be collected on a day, time and venue agreed upon by myself and the manager at each individual service centre. Provision will also be made for alternate meeting dates should it be required.

Potential benefits of the study

Information obtained from this study will inform the development of health-related interventions and programmes at these service centres that are based on the needs of members. Developed programmes could therefore benefit both participants and future users of these facilities by aiming to impact on autonomy and independence, as well as facilitate well-being and quality of life. Since this study also forms part of national study, the outcomes could be used as a model to guide similar research within service centres in other provinces in South Africa. Information obtained from participants will therefore be included in the national research study.

I would hereby like to request your support and permission to conduct the abovementioned research study at the selected service centres in the Western Cape. Ethical approval to

conduct this study has been received – Reference: HREC REF 663/2014. A copy of a detailed research protocol is available on request. If you have any questions regarding the study, please feel free to contact me, Fahmida Harris, my supervisors (Professor Amosun/Dr Kalula) or the chairperson of the UCT Research Ethics Committee, Professor Blockman.

Thank you.

Kind regards

Ms Fahmida Harris

Details of researcher

Title: Ms Surname: Harris Name: Fahmida

Tel: 021 691 8313 (h) 021 406 7679 (w)

Fax: 021 406 6323 (w) Cell: 082 777 0793

Email: fahmida.harris@uct.ac.za

Address: Division of Physiotherapy, Department of Health and Rehabilitation Sciences, F45, Old Main Building, GSH, Observatory. 7945

Details of supervisors

Professor Seyi Ladele Amosun

Dr Sebastiana Kalula

Research Supervisor

Research Co-Supervisor

Cell: 082 777 3877

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Email: seyi.amosun@uct.ac.za

Email: sebastiana.kalula@uct.ac.za

Professor Marc Blockman

UCT Research Ethics Committee

Tel: 021 406 6338

Email: marc.blockman@uct.ac.za

Appendix 3: Letter of Support from the National Department of Social Development

From: Dorothy Thuli Mahlangu (mailto:DorothyT@dsd.gov.za)
Sent: 05 August 2014 11:48 AM
To: Fahmida Harris
Cc: lorrainep@socdev.gov.za; Debra Fortuin
Subject: RE: UCT RESEARCH STUDY IN GERIATRICS - PERMISSION REQUESTED

Dear Fahmida

I am so excited to note that someone is interested in older persons. The proposed research is very much appreciated. As you aware the Older Persons Act, (13 of 2010) is mandating a shift from institutional Care to Community based Care and support services. The research will assist in identifying gaps in the current service provision. It will assist in establishing community-based care services where they are needed most and may also provide a best practice model.

You are therefore permitted to conduct the research and requested to consider sharing the outcome of your research with the Department. Thank you so much for the anticipated contribution
Regards,

Ms Dorothy Thuli Mahlangu
Director: Care and Services to Older Persons
National Department of Social Development
Tel: 012 312 7782
Cell: 0730383929
Email: DorothyT@dsd.gov.za

Appendix 4: Letter to Provincial Department of Social Development

Director
Older Persons Programme
Western Cape Department of Social Development
14 Queen Victoria Road
Cape Town
8000

Date: _____

Dear _____

RE: REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT SERVICE CENTRES IN THE WESTERN CAPE

I am a qualified physiotherapist employed at the University of Cape Town as a clinical educator working in the area of geriatrics. I am currently registered for MSc Physiotherapy by dissertation and the title of my thesis is: **‘An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa’**. Please see information below pertaining to the intended study for your perusal.

Background

The generation of older persons (elderly) is rapidly increasing with African countries experiencing the fastest growing population in the world. South Africa has the continents highest percentage of older persons, with the Western Cape making up 8.7% of the total national population. Ageing of populations is unfolding amidst widespread economic strain where the elderly face many challenges and are vulnerable to poor health outcomes (including ill health and disability relating to chronic non-communicable diseases like hypertension, diabetes, high cholesterol, obesity, tobacco and alcohol abuse), poor social support, altered family structures, poverty, abuse, the impact of HIV/AIDS and poor living conditions. These problems are worsened by a lack of infrastructure and services within the community and eventually contribute significantly to their loneliness and isolation.

Globally, governments are becoming increasingly sensitive to the consequences of ageing and are more aware that the average life expectancy of its citizens will continue to increase. Thus in order to ensure that older persons enjoy good quality of life and age successfully, global policies on ageing recommend that services and programmes directed at the elderly should focus on improving psychosocial well-being, quality of life and independence.

It is also suggested that health promotion strategies should facilitate the prevention of disease and disability in the elderly, while ensuring the enablement of physical and social environments. Thus, in order to understand the health, welfare and social support needs of the elderly, their health status, functioning and quality of life needs to be measured.

Service centres support successful ageing by providing a wide range of opportunities for health, social, recreational and educational services for the elderly, as well as volunteer development advocacy and outreach. Attendance at these centres have also been found to improve psychological wellbeing, satisfy social needs, improve friendships and stress levels, as well as contribute to a positive perception of general health and wellbeing.

Service centres were developed internationally but have now become increasingly popular in South Africa. Previous correspondences with your department indicated that there is an incomplete national data base on service centres and programmes implemented at these centres. However, in the Western Cape there are 200 registered service centres distributed across various districts and municipalities. Although these service centres cater for a variation in the population it serves, there is very little information available on needs-based service provision. In addition, organisational structures, designs and services, as well as voluntary membership vary in characteristics at these services and therefore it is unclear what the possible links are between characteristics of members and services provided. Details on how these service centres are managed, as well as their programme delivery are also unclear.

Purpose of the study

The purpose of this study is to explore the characteristics of service centres for older persons and the services provided at these facilities. This includes determining its organisational structures, the managers' profile, their perception of the needs of elderly members at the centre and types of services offered. In addition, this study also aims to gain an understanding of the older persons' (members) health and well-being, their health care needs and demand

for services, as well as determine if programmes offered are relevant and cater for their needs. Exploration of the social demographic profile of members at the service centres will provide information pertaining to the economic background and psychosocial characteristics that could impact health care needs.

Procedure for the study

Participants (managers and members of service centres) will be recruited from the provincial database of 200 service centres within the five districts and Cape Metropole in the Western Cape. However, due to time constraints and limited resources, only a selected sample of service centres will be included in this study (see attached list). Participants (managers and members of service centres) will be interviewed by the researcher or trained fieldworkers in their preferred language and assisted to complete a questionnaire. These fieldworkers would receive procedural training, will be required to provide their written informed consent to assist with the study and also be requested to complete and sign a confidentiality agreement as a method to protect the rights of those who participate in the study. Individual consent will be obtained from each participant and confidentiality assured at all times.

Once permission is obtained from your office to proceed with this study, it is my intention to notify the district office of the intended study and recruit support from individual managers and members of the selected centres. Data will be collected on a day, time and venue agreed upon by myself and the manager at each individual service centre. Provision will also be made for alternate meeting dates should it be required.

Potential benefits of the study

Information obtained from this study will inform the development of health-related interventions and programmes at these service centres that are based on the needs of members. Developed programmes could therefore benefit both participants and future users of these facilities by aiming to impact on autonomy and independence, as well as facilitate well-being and quality of life. Since this study also forms part of national study, the outcomes could be used as a model to guide similar research within service centres in other provinces in South Africa. Information obtained from participants will therefore be included in the national research study.

I would hereby like to request your support and permission to conduct the above-mentioned research study at the selected service centres in the Western Cape. Ethical approval to conduct this study has been received – Reference: HREC REF: 663/2014. Permission has also been granted by the National Department of Social Development. A copy of a detailed research protocol is available on request. If you have any questions regarding the study, please feel free to contact me, Fahmida Harris, my supervisors (Professor Amosun/Dr Kalula) or the chairperson of the UCT Research Ethics Committee, Professor Blockman.

Thank you.

Kind regards

Ms Fahmida Harris

Details of researcher

Title: Ms Surname: Harris Name: Fahmida

Tel: 021 691 8313 (h) 021 406 7679 (w)

Fax: 021 406 6323 (w) Cell: 082 777 0793

Email: fahmida.harris@uct.ac.za

Address: Division of Physiotherapy, Department of Health and Rehabilitation Sciences, F45, Old Main Building, GSH, Observatory. 7945

Details of supervisors

Professor Seyi Ladele Amosun

Research Supervisor

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Dr Sebastiana Kalula

Research Co-Supervisor

Cell: 083 516 0961

Email: sebastiana.kalula@uct.ac.za

Professor Marc Blockman

UCT Research Ethics Committee

Tel: 021 406 6338

Email: marc.blockman@uct.ac.za

Appendix 5: Letter to Service Centre Managers (Request for participation of service centre in study)

Manager
Service Centre for Older Persons

Date: _____

Dear Sir / Madam

RE: NOTIFICATION OF RESEARCH STUDY TO BE CONDUCTED AT SERVICE CENTRES IN THE WESTERN CAPE

I am a qualified physiotherapist employed at the University of Cape Town as a clinical educator working in the area of geriatrics. I am currently registered for MSc Physiotherapy by dissertation and the title of my thesis is: **‘An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa’**.

Please be herewith notified of my intention to conduct a research study at selected service centres (find list attached) that are under your supervision in the _____ district. These service centres were recruited from a provincial database of 200 service centres within the five districts and Cape Metropole in the Western Cape. Find attached the approval documentation from the Department of Social Development (DSD).

Service centres are distributed across various districts/municipalities and accessibility to means of communication is not clear. It is therefore requested from you to provide me with this information in order to arrange a meeting with the centre manager. Your support to recruit participating managers will be highly appreciated. Please see information below pertaining to the intended study for your perusal.

Background

The generation of older persons (elderly) is rapidly increasing with African countries experiencing the fastest growing population in the world. South Africa has the continents highest percentage of older persons, with the Western Cape making up 8.7% of the total national population. Ageing of populations is unfolding amidst widespread economic strain

where the elderly face many challenges and are vulnerable to poor health outcomes (including ill health and disability relating to chronic non-communicable diseases like hypertension, diabetes, high cholesterol, obesity, tobacco and alcohol abuse), poor social support, altered family structures, poverty, abuse, the impact of HIV/AIDS and poor living conditions. These problems are worsened by a lack of infrastructure and services within the community and eventually contribute significantly to their loneliness and isolation.

Globally, governments are becoming increasingly sensitive to the consequences of ageing and are more aware that the average life expectancy of its citizens will continue to increase. Thus in order to ensure that older persons enjoy good quality of life and age successfully, global policies on ageing recommend that services and programmes directed at the elderly should focus on improving psychosocial well-being, quality of life and independence. It is also suggested that health promotion strategies should facilitate the prevention of disease and disability in the elderly, while ensuring the enablement of physical and social environments. Thus, in order to understand the health, welfare and social support needs of the elderly, their health status, functioning and quality of life needs to be measured.

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Service centres were developed internationally but have now become increasingly popular in South Africa. Although these service centres cater for a variation in the population it serves, there is very little information available on needs-based service provision. In addition, organisational structures, designs and services, as well as voluntary membership vary in characteristics at these services and therefore it is unclear what the possible links are between characteristics of members and services provided. Details on how these service centres are managed, as well as their programme delivery are also unclear.

Purpose of the study

The purpose of this study is to explore the characteristics of service centres for older persons and the services provided at these facilities. This includes determining its organisational

structures, the managers' profile, their perception of the needs of elderly members at the centre and types of services offered. In addition, this study also aims to gain an understanding of the older persons' (members) health and well-being, their health care needs and demand for services, as well as determine if programmes offered are relevant and cater for their needs. Exploration of the social demographic profile of members at the service centres will provide information pertaining to the economic background and psychosocial characteristics that could impact health care needs.

Procedure for the study

Data will be collected on a day, time and venue agreed upon by the researcher and the manager at each individual service centre. Provision will also be made for alternate meeting dates should it be required. Participants (managers and members of service centres) will be interviewed by the researcher or trained fieldworkers in their preferred language and assisted to complete a questionnaire. Please note that fieldworkers will receive procedural training and be required to provide their written informed consent to assist with the study. They will also be requested to complete and sign a confidentiality agreement as a method to protect the rights of those who participate in the study. Individual consent will be also be obtained from each participant and their confidentiality assured at all times.

Potential benefits of the study

Information obtained from this study will inform the development of health-related interventions and programmes at these service centres that are based on the needs of members. Developed programmes could therefore benefit both participants and future users of these facilities by aiming to impact on autonomy and independence, as well as facilitate well-being and quality of life. Since this study also forms part of national study, the outcomes could be used as a model to guide similar research within service centres in other provinces in South Africa. Information obtained from participants will therefore be included in the national research study.

I would hereby like to request your support to conduct the above-mentioned research study at your selected service centre. Ethical approval to conduct this study has been received – Reference: HREC REF: 663/2014. A copy of a detailed research protocol is available on request.

If you have any questions regarding the study, please feel free to contact me, Fahmida Harris, my supervisors (Professor Amosun/Dr Kalula) or the chairperson of the UCT Research Ethics Committee, Professor Blockman.

Thank you.

Kind regards

Ms Fahmida Harris

Details of researcher

Title: Ms Surname: Harris Name: Fahmida

Tel: 021 691 8313 (h) 021 406 7679 (w)

Fax: 021 406 6323 (w) Cell: 082 777 0793

Email: fahmida.harris@uct.ac.za

Address: Division of Physiotherapy, Department of Health and Rehabilitation Sciences,
F45, Old Main Building, GSH, Observatory. 7945

Details of supervisors

Professor Seyi Ladele Amosun

Dr Sebastiana Kalula

Research Supervisor

Research Co-Supervisor

Cell: 082 777 3877

Cell: 083 516 0961

Email: seyi.amosun@uct.ac.za

Email: sebastiana.kalula@uct.ac.za

Professor Marc Blockman

UCT Research Ethics Committee

Tel: 021 406 6338

Email: marc.blockman@uct.ac.za

Appendix 6: Information sheet – Managers of Service Centres for Older Persons

Title: *'An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa'*

Division of Physiotherapy

Department of Health & Rehabilitation Sciences

F45, Old Main Building

GSH, Observatory

7925

Date: _____

Dear Sir / Madam

Re: Participation in Research Study

As part of the requirements in fulfilment of a Master's degree at the University of Cape Town, I am conducting a study to explore the characteristics of service centres for older persons in the Western Cape, the managers of the centres, and the services provided by the centres.

This study also aims to gain an understanding of the older persons' (members) health and well-being, their health care needs and demand for services. It is intended that the results of this study will contribute to the development of interventions and programmes at the service centres, based on the needs of the older persons they serve. Information obtained from this study may be included in a national research study and will be publicised.

As a result of your affiliation to a senior service centre, your name was selected at random from a list of registered service centres in the Western Cape. Although research findings of this study will benefit future members of service centres, there is no direct benefit to you as a participant. Participation in this study is voluntary and will not negatively affect your employment at the service centre, neither is there any known health related or physical risk of injury to yourself.

Trained fieldworkers or I will meet with you at a date and time agreed upon. You will be given a written consent form to complete and sign. This indicates that you understand how the study will be carried out, the implications and consequences of your participation, and that you are willing to participate in the study. Thereafter, you will be assisted to complete a questionnaire

that will be in a language that will be easily understood. The questionnaire requests information about you as the manager of the centre, the structure of the centre, and the services provided by the centre to its members. This process should take approximately 15 minutes to complete. Please note that we will be available to clarify any questions you may have. You can also refuse to answer any questions that make you uncomfortable.

Information will be kept confidential. Your name is only on the informed consent form and will not be paired or reflected with the results of this study. Only information provided by you will be represented. The data will be stored in a password protected database, will only be available to researchers involved in the study, and will be destroyed once the study is completed. Please note that should you wish to withdraw from the study, you will be able to do so only before data is submitted.

Thank you in advance for your co-operation. If you would like a summary of our findings, it will be made available to you via the Department of Social Development, its individual provincial and district offices, as well as your affiliated service centre.

If you have any questions regarding the study, please feel free to contact me, Fahmida Harris, or my supervisors (Professor Amosun/Dr Kalula). This study has been approved by the Human Research Ethics Committee (HREC), Faculty of Health Sciences at the University of Cape Town. Should you have any questions or concerns about your rights or welfare as research participants, you may contact the HREC chairperson.

Sincerely

Fahmida Harris (principal researcher)

BSc Physiotherapy, Clinical Educator, UCT

Tel: 021 406 7679 / 082 777 0793

Fax: 021 406 6323

Email: fahmida.harris@uct.ac.za

Division of Physiotherapy, Department of Health and Rehabilitation Sciences, F45, Old Main Building, GSH, Observatory, 7945

Supervisors

Prof Seyi Ladele Amosun (Tel: 082 777 3877)

seyi.amosun@uct.ac.za

Dr Sebastiana Kalula (Tel: 083 516 0961)

sebastiana.kalula@uct.ac.za

HREC Chairperson

Prof Marc Blockman (Tel: 021 406 6338)

marc.blockman@uct.ac.za

Appendix 7: Managers Informed Consent Form

Participant Informed Consent Form – Managers of service centres for older persons

TITLE: ‘An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa’

I, _____ (full name and surname), have read / have had read to me by _____ (full name and surname), the information sheet regarding participation in a research study conducted by a masters student at the University of Cape Town. The objectives of the study have been described to me in a language that I understand. I understand what is required of me and I have had all my questions answered. I do not feel that I am forced to take part in this study and am doing so out of my own free will. I know that my identity will not be disclosed, and that I can withdraw at any time if I so wish, provided it is before data is entered. This will have no bad consequences for me. I acknowledge that I will not benefit directly from participating in this study.

Should I have further questions about this research study, I may contact:

Fahmida Harris (Researcher) Tel: 021 406 7679 Fax: 021 406 6323

Cell: 082 777 07 93 Email: fahmida.harris@uct.ac.za

Should I have any questions or concerns about my rights or welfare as a participant in this research study, I may contact: Professor Marc Blockman (Chairperson of the Human Research Ethics Committee, Faculty of Health Sciences, University of Cape Town)

Tel: 021 406 6411 Email: marc.blockman@uct.ac.za

Participant Name: _____

Signed/Thumbprint: _____ at _____
(place) on

_____ (date)

Researcher / Field Worker Name: _____

Signed: _____ at _____ (place) on
_____ (date)

Witness Name: _____

I hereby attest that the abovementioned participant has understood the consent process and has willingly agreed to participate in this study.

Signed: _____ at _____ (place) on
_____ (date)

Appendix 8: Information sheet – Members of Service Centres for Older Persons

Title: *'An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa'*

Division of Physiotherapy

Department of Health & Rehabilitation Sciences

F45, Old Main Building

GSH, Observatory

7925

Date: _____

Dear Sir / Madam

Re: Participation in Research Study

I am a student completing my postgraduate master's degree at the University of Cape Town, I am conducting a study to explore the profile of members at service centres for older persons in the Western Cape, as well as the characteristics of managers and services provided.

This study aims to gain an understanding of the needs and functional abilities of older persons who are members at these centres. It is intended that the results of this study will provide information on whether the needs of members attending the centres are met. Information obtained from this study may be included in a national research study and will be publicised.

The service centre at which you are a member was selected at random from a list of registered service centres in the Western Cape. Thus, as a result of your affiliation you were afforded the opportunity to partake in this study. Although research findings of this study will provide insight into the management of service centres, there is no direct benefit to you as a participant. Your participation in this study is voluntary and will not negatively affect your membership at the service centre, neither is there any known health related or physical risk of injury to yourself.

Trained fieldworkers or I will meet with you at a date and time agreed upon. You will be given a written consent form to complete and sign. This indicates that you understand how the study will be carried out, the implications and consequences of your participation, and that you are willing to participate in the study. Thereafter, you will be assisted to complete three questionnaires that will be in a language that will be easily understood. The questionnaires

request information about yourself, your quality of life, your abilities and challenges you may be facing. This process should take approximately 45 minutes to complete. Please note that we will be available to clarify any questions you may have. You can also refuse to answer any questions that make you uncomfortable.

Information will be kept confidential. Your name is only on the informed consent form and will not be paired or reflected with the results of this study. Only information provided by you will be represented.

The data will be stored in a password protected database, will only be available to researchers involved in the study, and will be destroyed once the study is completed. Please note that should you wish to withdraw from the study, you will be able to do so only before data is submitted.

Thank you in advance for your co-operation. If you would like a summary of our findings, it will be made available to you via the Department of Social Development, its individual provincial and district offices, as well as your affiliated service centre.

If you have any questions regarding the study, please feel free to contact me, Fahmida Harris, or my supervisors (Professor Amosun/Dr Kalula). This study has been approved by the Human Research Ethics Committee (HREC), Faculty of Health Sciences at the University of Cape Town. Should you have any questions or concerns about your rights or welfare as research participants, you may contact the HREC chairperson.

Sincerely

Fahmida Harris (principal researcher)

BSc Physiotherapy, Clinical Educator, UCT

Tel: 021 406 7679 / 082 777 0793

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Dr Sebastiana Kalula (Tel: 083 516 0961)

sebastiana.kalula@uct.ac.za

HREC Chairperson

Prof Marc Blockman (Tel: 021 406 6338)

marc.blockman@uct.ac.za

Appendix 9: Members Informed Consent Form

TITLE: *'An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa'*

I, _____ (full name and surname), have read / have had read to me by _____ (full name and surname), the information sheet regarding participation in a research study conducted by a masters student at the University of Cape Town. The objectives of the study have been described to me in a language that I understand. I understand what is required of me and I have had all my questions answered. I do not feel that I am forced to take part in this study and am doing so out of my own free will. I know that my identity will not be disclosed, and that I can withdraw at any time if I so wish, provided it is before data is entered. This will have no bad consequences for me. I acknowledge that I will not benefit directly from participating in this study.

Should I have further questions about this research study, I may contact:

Fahmida Harris (Researcher) Tel: 021 406 7679 Fax: 021 406 6323

Cell: 082 777 07 93 Email: fahmida.harris@uct.ac.za

Should I have any questions or concerns about my rights or welfare as a participant in this research study, I may contact:

Professor Marc Blockman (Chairperson of the Human Research Ethics Committee, Faculty of Health Sciences, University of Cape Town) Tel: 021 406 6411 Email: marc.blockman@uct.ac.za

Participant name: _____

Signed: _____ at _____ (place) on _____ (date)

Researcher / Field worker name: _____

Signed: _____ at _____ (place) on _____ (date)

I have witnessed the accurate reading of the consent form to _____
(participant member), and the individual has had the opportunity to ask questions. I hereby
attest that he/she has understood the consent process and has willingly agreed to participate
in this study.

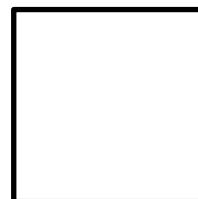
Name of witness: _____

Thumbprint of Participant:

Signed: _____

at _____ (place) on

_____ (date)



Appendix 10: Questionnaire Phase 1 (Modified Self-developed)

QUESTIONNAIRE: EXPLORING SERVICE CENTRES FOR OLDER PERSONS – PHASE 1

Characteristics of Senior Service Centres (Please tick correct option)

3. Allocated number of the service centre: _____

4. Name of the district in which the centre is located: _____

5. What is the organisational structure of the service centre?

Government

Non- Profit

Private

Others

1

2

3

4

If 4, please specify:

6. Where is the location of the centre?

Urban

Rural

Mixed

1

2

3

7. When was this centre started?

Please specify _____

8. When was this centre registered with the Department of Social Development?

9. What organisation is the centre affiliated to?

(a) Health care organisations

(b) Social development organisations

(c) Religious organisations

(d) None

(e) Others, please specify _____

10. Is the community involved in the centre?

(a) Yes

(b) No

- (c) Sometimes
 - (d) Not Sure
11. How many members belong to the centre? (Please give an average number) _____
12. What is the predominant gender of the members of the centre?
- (a) Female
 - (b) Male
 - (c) Mixed
13. What are the needs of the members of the centre that the centre attempts to meet?
Please specify,
- _____
- _____
- _____
- _____
14. What is the title of the person in charge of the delivery of programs offered by the centre?
- (a) Centre director
 - (b) Activity director
 - (c) Site manager
 - (d) Administrator
 - (e) Site supervisor
 - (f) Other (please specify) _____
15. What is the status of employment of the person in charge of programme delivery?
- (a) Full time
 - (b) Part time
 - (c) Permanent
 - (d) Temporary
 - (e) Contract
 - (f) Unknown

(g) Other (Please specify) _____

16. What is the highest educational qualification of the person in charge of programme delivery?

- (a) Primary School
- (b) High School
- (c) College
- (d) University graduate (bachelor or masters)
- (e) Others
- (f) Unknown
- (g) None

17. What type of remuneration is available for the person in charge of programme delivery?

Paid Salary	Volunteer	Unknown
1	2	3

18. What types of staff support are available for programme delivery (multiple responses allowed)

- (a) Volunteers
- (b) Staff paid by centre
- (c) Contract employees
- (d) Peer leaders
- (e) Professionals
- (f) Students
- (g) Staff from another organisation
- (h) None

19. Do members pay to belong to this centre?

Yes	No	Not sure
1	2	3

20. Do you have an annual budget to run this centre?

Yes

No

Not sure

1

2

3

21. If yes, how much is the budget? _____

22. From where does the centre obtain the funds to function? (multiple responses allowed)

(a) Government _____

(b) Members _____

(c) Public donors _____

(d) Donor organisations _____

(e) Other _____

23. If funds are obtained from multiple sources, what proportion of your annual budget comes from each source?

(a) Government _____

(b) Members _____

(c) Public donors _____

(d) Donors organisations _____

(e) Other _____

24. What do you spend your annual budget on? (multiple responses allowed)

(a) Salaries of staff _____

(b) Meeting the needs of members _____

(c) Upkeep of office/meeting space _____

(d) Other _____

25. What proportion of your budget is spent on each expenditure item?

(a) Salaries of staff _____

(b) Meeting the needs of members _____

(c) Upkeep of office/meeting space _____

(d) Others _____

26. What factors influence the types of programs the centre offers? (multiple responses allowed)

(a) Interest of clients

(b) Needs of clients

(c) Mandated

(d) Other (please specify) _____

27. Did the person responsible for programme delivery receive any training towards managing the centre?

(a) Yes

(b) No

(c) Not sure

28. If yes, describe the training received (content, length of training)

29. Do you think a training programme is needed?

(a) Yes

(b) No

(c) Not sure

30. What should the training programme consist of? Please describe:

31. Which of the following programmes are offered by the centre? (Please respond either Yes or No)

Blood pressure monitoring	_____	Cholesterol screening	_____
Glucose testing	_____	Vision/hearing screening	_____
Nutrition programmes	_____	Safety programmes in medication use	_____
Fall risk screening	_____	Home safety programmes	_____
Education programmes for caregivers	_____	Chronic disease self-management	_____
Education programmes for members	_____	Balance and/or strength exercise	_____
Dance and/or aerobics	_____	Walking programmes	_____
Yoga, Pilates and/or stretch exercise	_____	Swim and/or water aerobics	_____
Arts and craft design	_____	Social activities	_____
Social work service	_____	Information on housing	_____
Guardianship for members without families	_____	Transport	_____
Outreach programmes to find other older persons	_____	Others: (please specify)	_____

32. Are these services provided in the local languages of the members?

- (a) Yes
- (b) No
- (c) Not sure

Appendix 11: Questionnaire Phase 2 (Self-developed)

QUESTIONNAIRE: EXPLORING THE PROFILE OF MEMBERS OF SERVICE CENTRES IN PHASE 2

(Please tick correct option)

1. Allocated number of the service centre _____

1. Name of the district in which the centres is located _____

2. How long have you been a member in this centre? _____

3. What is your gender?

Male

Female

4. What is your date of birth? ____/____/____ (Day/Month/Year)

5. What is the highest level of education you received?

None at all

Primary school

Secondary school

Tertiary

1

2

3

4

6. What is your marital status?

Never married

Married

Separated

Divorced

Widowed

1

2

3

4

5

7. Who are you living with?

Alone

Spouse

Children

Extended
family

Other (please
specify)

1

2

3

4

5

If Other, please specify _____

8. From where do you obtain resources to look after yourself? (you may tick more than one response)

Old age grant

Pension

Spouse

Children

Family

Other (please specify)

1

2

3

4

5

6

If Other, please specify _____

9. Are you employed at the moment? (Working and getting paid?)

Yes

No

Sometimes

Not sure

1

2

3

4

10. If you are employed, please describe what your work entails.

11. Do you use tobacco? (smoking, snuffing or chewing)

No, I do not use tobacco	Yes, I do everyday	Yes, I do 3 times a week	Yes, I do 5 times a week
1	2	3	4

12. Do you take alcohol?

No, I do not take alcohol	Yes, I do everyday	Yes, I do 3 times a week	Yes, I do 5 times a week
1	2	3	4

13. Do you eat fruits?

No, I do not eat fruits	Yes, I do everyday	Yes, I do 3 times a week	Yes, I do 5 times a week
1	2	3	4

14. Do you eat vegetables?

No, I do not eat vegetables	Yes, I do everyday	Yes, I do 3 times a week	Yes, I do 5 times a week
1	2	3	4

15. Identify your favourite activities that you partake in

Reading	_____	Watching TV	_____
Walking	_____	Gardening	_____
Farming	_____	Dancing	_____
Exercise class	_____	Swimming	_____
Sewing	_____	Story telling	_____
Knitting	_____	Listening to radio	_____
Running	_____	Jogging	_____
Travelling	_____	Playing games	_____
Driving	_____	Cycling	_____
Arts and crafts	_____	Sports	_____

Cooking	_____	Baby sitting	_____
Volunteer work	_____	Drama/acting	_____
Other (please specify)	_____		

16. Do you have any of the following medical conditions?

Hypertension	_____	Diabetes	_____
Asthma	_____	Heart disease	_____
Blindness	_____	Osteoporosis	_____
Dizziness/fainting	_____	Arthritis	_____
Lower leg amputation	_____	Stroke	_____
Falls	_____	Cataracts	_____
Visually impaired	_____	Other (please specify)	_____

17. Who diagnosed the medical condition?

Doctor	_____	Nurse	_____
Health care professional	_____	Native doctor	_____
Self	_____	Friend	_____
Other (please specify)	_____		

18. Can you hear when someone talks to you?

Yes, my hearing is good	Yes, but not always	No, never	Not sure
1	2	3	4

19. Can you follow the conversation when you are with several people?

Yes, I do	Yes, but not always	No, never	Not sure
1	2	3	4

20. How much difficulty do you have in seeing and recognising an object or a person you know across the road?

None	Mild	Moderate	Severe	Extreme/cannot do
1	2	3	4	5

21. How much difficulty do you have in seeing and recognising an object at arms lengths for example, reading or sewing?

None	Mild	Moderate	Severe	Extreme/cannot do
1	2	3	4	5

22. Do you lose control of your urine?

Yes	No	Not sure
1	2	3

23. Can you stand without support for one minute?

Yes	No	Not sure
1	2	3

24. Can you stand with support for one minute?

Yes	No	Not sure
1	2	3

25. Can you walk without support for 10 minutes?

Yes	No	Not sure
1	2	3

26. Can you walk with support for 10 minutes?

Yes	No	Not sure
1	2	3

27. Have you fallen within the past year?

Yes	No	Not sure
1	2	3

28. Do you know why you fell?

Yes	No	Not sure
1	2	3

If Yes, please comment: _____

29. Are you afraid of falling?

Yes	No	Not sure
1	2	3

30. Are you currently taking any medications?

Yes	No	Not sure
1	2	3

31. Do you know the reason why you are on medication?

I am not on medication	Yes, I know	No, I do not know	I am not sure
1	2	3	4

32. Who prescribed the medication for you? (please specify) _____

33. Do you take medication you bought across the counter?

Yes	No	Not sure
1	2	3

34. Do you remember to take your medication regularly?

I am not on medication	I remember	No, I do not	Sometimes	No response
1	2	3	4	5

35. Do you feel you have an adequate social support system?

Yes, I do	No, I do not	Sometimes	Not sure	No response
1	2	3	4	5

36. Would you describe yourself as being engaged in your community?

Yes, I am	No, I am not	Sometimes	Not sure	No response
1	2	3	4	5

37. If so, in what are you involved in? (Example: attending community meetings; assisting people in need etc.)

38. In the past month have you,

	Yes	No	Cannot say
a Spent time doing a hobby (something you like doing)?	_____	_____	_____
b Gone out for a walk or an outing/excursion?	_____	_____	_____
c Gone out to visit friends and relatives?	_____	_____	_____
d Received visits from relatives and friends in your home?	_____	_____	_____
e Watch television or listen to radio?	_____	_____	_____
f Done unpaid community/volunteer work?	_____	_____	_____
g Helped a family member or friend/neighbour?	_____	_____	_____

h Gone to a prayer group/mosque/place of worship? _____

39. Please describe your plans for the immediate future?

Appendix 12: Questionnaire Phase 2 (WHOQOLBREF)

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you. This assessment asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last four weeks**.

1. How would you rate your quality of life?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

2. How satisfied are you with your health?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

The following questions ask about **how much** you have experienced certain **things in the last four weeks**:

3. To what extent do you feel that physical pain prevents you from doing what you need to do?

I have no physical pain	Pain has not prevented me	A little extent	Much extent	Not sure
1	2	3	4	5

4. How much do you need any medical treatment to function in your daily life?

I do not need medical treatment	Some treatment	Much treatment	Not sure
1	2	3	4

5. How much do you enjoy life?

I do not enjoy life	A little	Much	Not sure
1	2	3	4

6. To what extent do you feel your life to be meaningful?

My life is not meaningful	Meaningful a little	Very meaningful	Not sure
1	2	3	4

7. How well are you able to concentrate?

Not at all	A little	A moderate amount	Very much	Extremely
1	2	3	4	5

8. How safe do you feel in your daily life?

Not at all	A little	A moderate amount	Very much	Extremely
1	2	3	4	5

9. Does your physical environment contribute to your illness or health?

Contributes to my illness	Contributes to my healthy state	Not sure
1	2	3

The following questions ask about how completely you experience or were able to do certain things **in the last four weeks**:

10. Do you have enough energy for everyday life?

Not at all	A little	Moderately	Mostly	Completely
1	2	3	4	5

11. Are you able to accept your bodily appearance?

Not at all	A little	Moderately	Mostly	Completely
1	2	3	4	5

12. Have you enough money to meet your needs?

Not at all	A little	A moderate amount	Mostly	Completely
1	2	3	4	5

13. How available to you is information that you need in your day to day life?

Not at all	A little	Moderately	Mostly	Completely
1	2	3	4	5

14. To what extent do you have the opportunity for leisure activities?

Not at all	A little	Moderately	Mostly	Completely
1	2	3	4	5

15. How well are you able to get around?

Very poor	Poor	Neither poor nor good	Good	Very good
1	2	3	4	5

16. How satisfied are you with your sleep?

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

17. How satisfied are you with your ability to perform your daily living activities?

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

18. How satisfied are you with your capacity for work?

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

19. How satisfied are you with yourself?

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

20. How satisfied are you with your personal relationships?

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

21. How satisfied are you with your sex life?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

22. How satisfied are you with the support from friends?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

23. How satisfied are you with your access to hospital, clinics to receive health care?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

24. How satisfied are you with your transport?

		Neither satisfied nor dissatisfied		
Very dissatisfied	Dissatisfied		Satisfied	Very satisfied
1	2	3	4	5

The following question refers to how often you have felt or experienced certain things **in the last four weeks**:

25. How often do you have negative feelings such as blue mood, despair, anxiety, and depression?

Never	Seldom	Quite often	Very often	Always
1	2	3	4	5

Appendix 13: Questionnaire Phase 2 (WHODAS II)

In the past 30 days, how much difficulty did you have in:	None	Mild	Moderate	Severe	Extreme / cannot do
Standing for long periods such as 30 mins	1	2	3	4	5
Taking care of your household responsibilities	1	2	3	4	5
Learning a new task, for example learning how to get to a new place?	1	2	3	4	5
How much of a problem did you have joining in community activities (eg festivities, religious or other activities) in the same way as anyone else can?	1	2	3	4	5
How much have you been emotionally affected by your health problems?	1	2	3	4	5

In the past 30 days, how much difficulty did you have in:	None	Mild	Moderate	Severe	Extreme / cannot do
Concentrating on doing something for 10 minutes?	1	2	3	4	5
Walking a long distance such as a kilometre (or equivalent)?	1	2	3	4	5
Washing your whole body?	1	2	3	4	5
Getting dressed?	1	2	3	4	5
Dealing with people you do not know?	1	2	3	4	5
Maintaining a friendship?	1	2	3	4	5
Your day to day work?	1	2	3	4	5

Overall, in the past 30 days, how many days were these difficulties present?

Record number of days _____

In the past 30 days, for how many days were you totally unable to carry out your usual activities or work because of any health condition?

Record number of days _____

In the past 30 days, not counting the days that you were totally unable, for how many days did you cut back or reduce your usual activities or work because of any health condition?

Record number of days _____

This concludes our interview. THANK YOU FOR PARTICIPATING.

Appendix 14: Questionnaire (Bertera et.al)

CROZER CHESTER MEDICAL CENTER WELLNESS CENTER SURVEY

The purpose of this survey is to help us understand the needs of seniors in the area of health promotion and disease prevention. There are no right or wrong answers. Your responses should be based on your personal ideas, beliefs, and experiences.

All responses will be kept strictly confidential, and you do not need to write your name on this form. The results of this survey will be used to plan a senior wellness center. Thank you very much for your cooperation.

Location No. _____

Date _____

I. GENERAL INFORMATION (Check with an X those that apply)

1. Sex Male _____ Female _____

2. Race/Origin

White (non-Hispanic) _____

Black (non-Hispanic) _____

Hispanic _____

Other or not sure _____

3. Do you live alone? Yes _____ No _____

4. In an average day, how many people do you talk to?

Please circle only one

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15+

5. How far did you go in school?

Please circle only one

< 4 5 6 7 8 9 10 11 12 13 14 15 16+

Elementary School

High School

College

6. What is your date of birth? _____

7. What is your ZIP code? _____

8. How long have you lived in this area? _____

II. HEALTH ACTIVITIES

9. Which of the following health-related topics are you interested in?

Check all that apply
with an X

How to exercise (walking) for exercise and pleasure

How to lose weight

Making friends with people my age

Cooking and shopping trips to improve nutrition

Dealing with loss of spouse, children, friends, and pets

Budgeting money

Writing a will

Safeguarding my home

How to quit smoking

Exercise and emotional well-being

Love and sex after 60

10. What is the most you would want to pay for a health course in any of the above mentioned subjects:

Please circle only one

\$1 \$3 \$5 \$10 \$15 \$20 \$25

III. FITNESS ACTIVITIES

11. Which of the following exercise activities would you be interested in?

Check all that apply
with an X

Walking

Jogging

Stationary bicycle

Trim and tone classes

Aerobics to music

- Stretching and toning to music _____
- Weights _____
- Treadmills _____
- Exercise for back and joint problems _____
- Yoga _____
- Rowing machine _____
- Self-defense _____

12. What is the most you would want to pay to attend classes on the above mentioned activities?

Please circle only one

\$1 \$3 \$5 \$10 \$15 \$20 \$25

IV. SPECIAL HEALTH TOPICS

13. Which of the following health topics are you interested in:

Check all that apply
with an X

- How to prevent/live with diabetes _____
- How to prevent/live with hypertension _____
- How to prevent/live with cancer _____
- Control of your urine _____
- Medications _____
- How to deal with changes in vision and hearing _____
- How to deal with changes in sleep patterns _____
- How to deal with changes in taste and smell _____
- Foot care _____
- Managing constipation _____
- How to prevent/live with osteoarthritis _____
- Fitness and nutrition: how it affects our bones _____
- Depression: how to deal with it/how to prevent it _____
- Memory: why do I have problems with it? _____
- Relaxation: how to practice it _____
- Cardiopulmonary resuscitation (CPR) _____
- How to deal with stress _____
- How exercise affects arthritis _____
- When to call the doctor _____

14. What is the most you would want to pay for a 1-hour special program on any of the above mentioned topics?

Please circle only one

\$1 \$3 \$5 \$10 \$15 \$20 \$25

V. PERSONAL INFORMATION

15. Who provides your transportation when you go places like shopping, visiting friends, going to the doctor?

Check all that apply
with an X

Yourself _____
Your family or friends _____
Use public transportation _____
Public agency (specify) _____

16. How important are the following things in your willingness to attend activities in the community

Check all that apply
with an X

Transportation _____
Cost of the activity _____
Whether people I know would attend _____
Time of day _____
Travel time to activity _____

17. If you were to attend a wellness program, which time of the day would be most convenient?

Check all that apply
with an X

Early morning _____
Late morning _____
Lunchtime _____
Early afternoon _____
Late afternoon _____
Evening _____

18. Some people seem to age faster than others. From the list below, check the items that you think are important to living longer.

Check all that apply
with an X

Heredity _____
Physical fitness _____
Economic security _____

Good eating habits or diet	_____
Taking medications/vitamins	_____
Love	_____
Close friends and family	_____
Ability to relax	_____
Clean air and water	_____
Laughter	_____
Not smoking	_____
Pure luck	_____
Drinking alcohol moderately or not at all	_____

19. Have you been hospitalized within the last year?
 Yes_____ No_____

20. How often do you use a doctor's office?

21. How many days have you been sick in bed within the last year?_____

22. Compared with others your age, how would you rate your health at present?
 Please check only one
 Excellent_____ Good_____ Average_____ Poor_____

23. Is your income:
 Under \$10,000 _____
 \$10,000-\$20,000 _____
 More than \$20,000 _____

24. Is there anything else you would like to share with us?

Appendix 15: Fieldworkers Informed Consent Form / Confidentiality Agreement

PARTICIPATORY INFORMED CONSENT FOR FIELDWORKERS

Research Study: UCT

‘An exploration of services and member profiles at Senior Service Centres in the Western Cape, South Africa’

I, _____ hereby acknowledge that I am agreeing to be a fieldworker and to assist in research processes (including data collection) to the below mentioned researcher of my own free will. I understand that I would receive training from the researcher on what duties are required of me as well as procedures of this study. I would have an opportunity to have all my questions answered. In agreeing to be a part of this research study, I acknowledge that all information I obtain pertaining to participant responses be kept confidential and that any concerns or questions relating to uncertainties within the research process will be discussed with the primary researcher. Should I no longer be able to assist with this research study I will inform the researcher mentioned below in writing at least 3 weeks prior but as soon as possible.

Participant (field worker)

Name & Surname: _____

Tel no: _____

Signed: _____ at _____ (place) on
_____ (date)

Researcher

Signed: _____ at _____ (place) on
_____ (date)

Researcher contact details

Name & Surname: FAHMIDA HARRIS

Tel: 021 4067679 (w)

Cell: 082 777 0793

Fax: 021 450 66323

Email: fahmida.harris@uct.ac.za

Witness: _____ Date: _____ Place: _____

Appendix 16: WHOQOL-BREF scoring

SCORING OF THE WHOQOL-BREF

The WHOQOL-BREF (Field Trial Version) produces four domain scores. There are also two items that are examined separately: question 1 asks about an individual's overall perception of quality of life and question 2 asks about an individual's overall perception of his or her health. Domain scores are scaled in a positive direction (i.e. higher scores denote higher quality of life). The mean score of items within each domain is used to calculate the domain score. Mean scores are then multiplied by 4 to make domain scores comparable with the scores used in the WHOQOL-100, and subsequently transformed to a 0-100 scale, using the formula above.

A method for the manual calculation of individual scores is below:

Physical domain= $((6-Q3) + (6-Q4) + Q10 + Q15 + Q16 + Q17 + Q18) \times 4$

Psychological domain= $(Q5 + Q6 + Q7 + Q11 + Q19 + (6-Q26)) \times 4$

Social Relationships domain= $(Q20 + Q21 + Q22) \times 4$

Environment domain= $(Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25) \times 4$

Where more than 20% of data are missing from an assessment, the assessment should be discarded. Where up to two items are missing, the mean of other items in the domain is substituted. Where more than two items are missing from the domain, the domain score should not be calculated (except for domain 3, where the domain should only be calculated if <1 item is missing).